

CAVITY FILTER DESIGN

Comprod Communications has one of the most rugged, high quality cavity filter constructions in the industry with our field proven, temperature-compensated cavities. The flexibility of four versions of filters, BANDPASS, NOTCH, PASS-REJECT, and X-PASS, available in 2", 4", 6.625", & 10" cavities, allow for any system to be designed for maximum performance and efficiency. All of the following filters can be achieved by only swapping the loops, while maintaining the same cavity, only using 6.625" and 10" cavities.

1. BANDPASS CAVITY FILTER – Passes one narrow band of frequencies and attenuates all others with increasing attenuation above and below the pass frequency. The adjustable selectivity characteristics (rotatable loops) to allow a trade-off between insertion loss (0.5-3.0dB) and selectivity. This filter is ideal when the interfering frequencies are not known to any degree of accuracy or when very broadband filtering is needed.

2. NOTCH – Passes and rejects a relatively wide band of frequencies, while rejecting a very narrow band of frequencies. Notch depth is variable from 15-25dB. Both pass and notch frequencies must be known. The wide passband can be an advantage when filtering multiple channel transmitters and receivers. This filter is ideal for very close separations (70-200KHz) in VHF and (200-400KHz) in UHF.

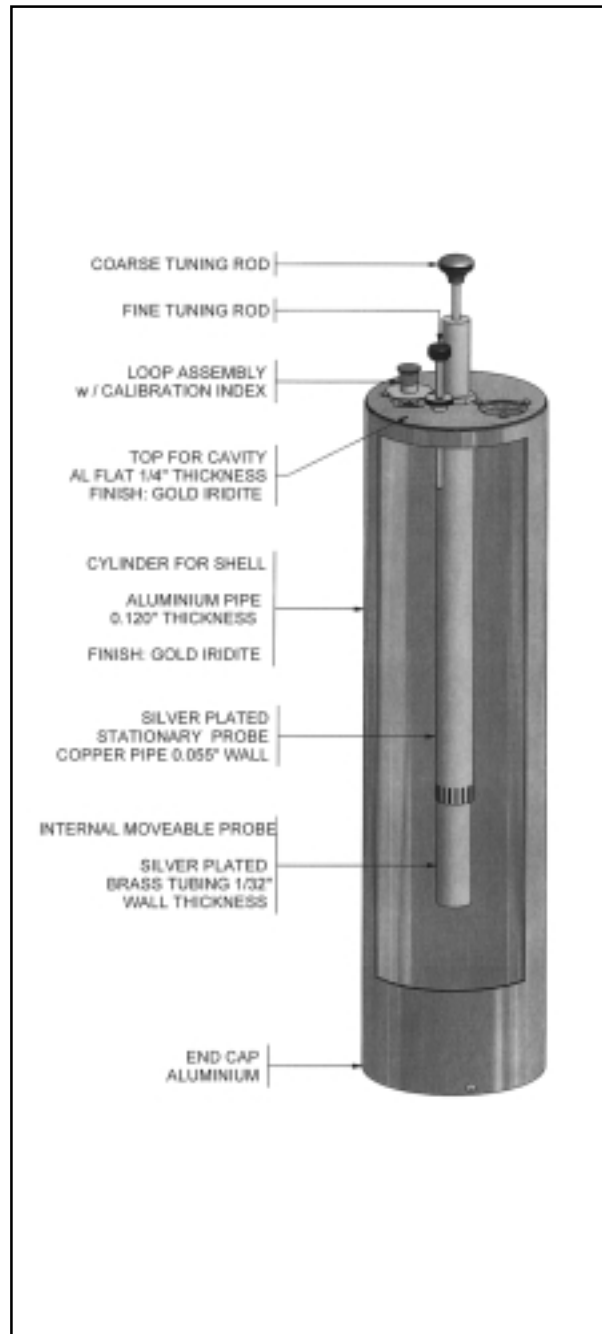
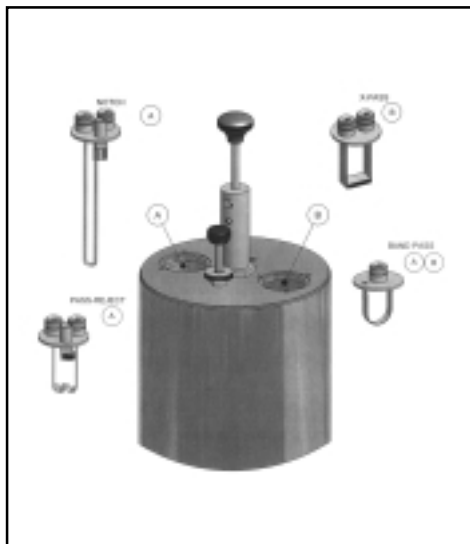
3. PASS-REJECT – Passes and rejects a relatively narrow band of frequencies. This filter has the greatest notch depth when compared to other types. Notch depth is adjustable, but is referred to a passband insertion loss (0.3dB or 0.6dB typical). Best filter type for moderately close to wide separations (200KHz and greater in VHF and 400KHz and greater in UHF).

4. X-PASS – A special type of filter for expandable multicoupler/combiner applications. Characteristics are identical to a bandpass filter, but has a third port for coupling to other channels. This filter is ideal for close frequency spacing with extremely low losses, acts as a hybrid Combiner/Multicoupler, yet is extremely flexible and expandable; 1-21 and over Channel capabilities.

All of Comprod Communications 6.625" and 10" filters have two hand movable tuning rods, a coarse and a fine, for a 35% faster tuning capability. Using adjustable silver-plated coupling loops and calibration index label, it easily facilitates setting cavity insertion loss as required for each application.

The combination of heavy-gauge aluminum outer conductor, thick heliarc-welded cavity top plates, heavy silver plating on micro finished tuning assemblies, and Invar-based temperature compensation material results in constant performance levels and long-term reliability. Cavity and isolator connectors are Type N Female, with silver-plated brass bodies and gold-plated center contacts. Thru-line cable assemblies are made with high-quality connectors and RG-393B/U Teflon or RG-214/U cable, to provide excellent inter-modulation performance at high system power levels. Gold-plated cable connectors center contacts are soldered to the cable, and the dual shield is securely crimped to the connector barrel using pneumatic fixtures and precision dies. All of these attributes contribute to the high quality of products that our clients have become accustomed to.

For more information on Comprod Communications' X-Pass, Combiners, Multicouplers, Duplexers, Pass Reject, BandPass, or Notch filters, please do not hesitate to contact our Technical Support team at **1.800.603.1454** or **1.450.641.1454**.



FILTER NOMENCLATURE

PP – FF – XX – YY

PP – Product Category / Product Family
FF – Frequency Band / Frequency Range
XX – Cavity Size/# of Channels or Load Size or Termination
YY – Mounting Style

X Product Series

XTC – Xpandable Transmit Combiner System
XTR – Xpandable Transmit Receiver System
XRM – Xpandable Receiver Multicoupler
XBC – X-Band Coupler (Cross Band Couplers)
HTC – Hybrid Transmit Combiner



Product Categories – PP

- | | |
|---|---|
| 11 – Mount Kits | 51 – Bandpass Conversion Loops |
| 13 – Cable Kits/Accessories | 52 – Pass-Reject Conversion Loops |
| 19 – X-Racks | 53 – Notch Conversion Loops |
| 21 – LowPower Single Junction Isolator | 55 – X-Pass Conversion Loops |
| 22 – Low Power Dual Junction Isolator | 56 – 2 nd Harmonic Filter |
| 31 – MediumPower Single Junction Isolator | 57 – Combine Filter |
| 32 – Medium Power Dual Junction Isolator | 58 – Pre-Amp |
| 41 – HighPower Single Junction Isolator | 59 – Pre-Selector |
| 42 – HighPower Dual Junction Isolator | 60 – Multicoupler (XMF Version Reject/Pass) |
| 45 – RF Loads | 61 – BandPass Filter |
| 46 – Signal Sampler | 62 – Pass-Reject Filter |
| 47 – Hybrid Coupler (Single Band) | 63 – Notch Filter |
| 48 – Hybrid Decouplers VHF/UHF/800/900 | 64 – BandPass Duplexer Filter |
| 49 – Power Divider | 65 – Notch Duplexer Filter |
| | 66 – Pass-Reject Filter |
| | 67 – Notch/Pass Reject BP Duplexer Filter |
| | 68 – X-Pass Filter |
| | 69 – Paging Filter |

CP61-XX-7X Series

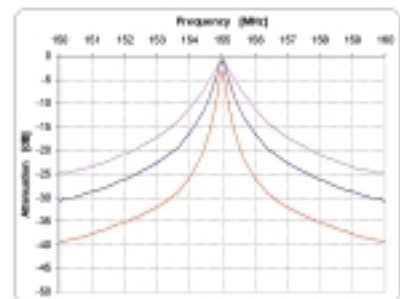
Comprod Band Pass filters are designed for minimizing interference from adjacent channels and outside systems. They are available in single, dual, triple or more units. Selectivity can be determined by the insertion loss of the cavity or by adding cavity units as needed. Each cavity is temperature compensated for operation between -40°C to +60° C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning applications.

- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems
- **Adjustable Loops**
 - Each cavity has a calibration index for easy field tuning



Electrical Specifications	61-03-71	61-06-71	61-11-71	61-13-71	61-40-71	61-74-71
Frequency Range, MHz	30-50	66-88	118-136	136-174	406-512	746-960
Frequency Spacing Min.	**** Please Refer To Curves ****					
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input Dependant on Insertion Loss, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
Insertion Loss	**** Please Refer To Curves ****					
Reject Attenuation	**** Please Refer To Curves ****					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications						
Maximum length, inches	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single Cavity	Dual Cavity	Triple Cavity
4" Cavity	61-XX-41	61-XX-42	61-XX-43
6.625" Cavity	61-XX-71	61-XX-72	61-XX-73
10" Cavity	61-XX-01	61-XX-02	61-XX-03



61-13-71

CP63-XX-7X Series

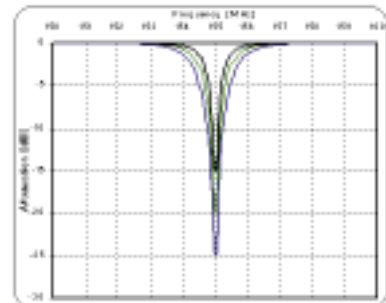
Comprod Notch filters are designed to reject one narrow band of frequencies, while passing all others in the operating band. They provide more isolation by eliminating close adjacent frequencies. The notch cavities can be cascaded or added to one another in order to sharpen the attenuation of the rejection curve. These cavities can be used individually or in multiples. Each cavity is temperature compensated for operation between -40°C to +60° C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning applications.

- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference



Electrical Specifications	63-03-71	63-06-71	63-11-71	63-13-71	63-40-71	63-74-71
Frequency Range, MHz	30-50	66-88	108-136	136-174	406-512	746-960
Frequency Spacing Min.	**** Please Refer To Curves ****					
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input Dependant on Insertion Loss, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
Insertion Loss	**** Please Refer To Curves ****					
Reject Attenuation	**** Please Refer To Curves ****					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications						
Maximum length, inches	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single Cavity	Dual Cavity	Triple Cavity
4" Cavity	63-XX-41	63-XX-42	63-XX-43
6.625" Cavity	63-XX-71	63-XX-72	63-XX-73
10" Cavity	63-XX-01	63-XX-02	63-XX-03



63-13-71

CP62-XX-7X Series

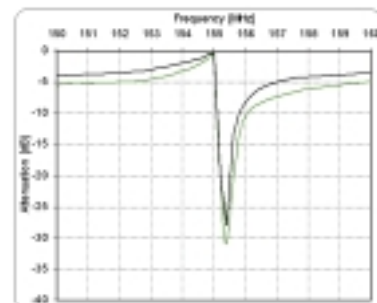
Comprod Pass Reject filters are designed to Pass one frequency and reject another. They provide more attenuation than our standard bandpass type cavities. These Cavities can reject frequencies on either the high or low side of the pass frequency. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning applications.

- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference



Electrical Specifications	62-03-71	62-06-71	62-11-71	62-13-71	62-40-71	62-74-71
Frequency Range, MHz	30-50	66-88	118-136	136-174	406-512	746-960
Frequency Spacing Min.	**** Please Refer To Curves ****					
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input, Watts	300	300	300	300	300	300
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
Insertion Loss	**** Please Refer To Curves ****					
Reject Attenuation	**** Please Refer To Curves ****					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications						
Maximum length, inches	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single Cavity	Dual Cavity	Triple Cavity
4" Cavity	62-XX-41	62-XX-42	62-XX-43
6,625" Cavity	62-XX-71	62-XX-72	62-XX-73
10" Cavity	62-XX-01	62-XX-02	62-XX-03



62-13-71

XMF MULTICOUPLERS

VHF, UHF, & 700/800/900MHz Xpandable BandPass Multicoupler Filters

The XMF (Xpandable Bandpass Multicoupler Filter) systems is one of the most unique transmit/receive multicouplers available. Each channel consists of one, two, or three bandpass filters in combination with an exclusive notch filter design, enabling system expansion without modification to existing system channels as long as applicable selectivity standards for minimum channel spacing are met.

This new notch filter approach provides a junction between channels, allowing channel frequencies to pass freely to or from the antennas, while diverting all other channel frequencies to the pass-through antenna line terminal and the remaining XMF system channels efficiently and effectively. This characteristic is field tunable over specified bands of operation without any alterations in construction.

Channels may be interconnected with any convenient length of cable. There are no length sensitive cables in the path between channel junction cavities. There is also no frequency order of interconnection required. The only requirement is that the minimum spacing for VHF is 0.8MHz and 2MHz at UHF frequencies be observed.

The XMF channels are supplied for wall or rack mounting. The individual cavities are mounted with stainless steel strap clamps, and two horizontal mounting bars, in either case, it may be located at a convenient spacing for rack or wall applications. Horizontally spaced mounting holes are standard 19" EIA rack spacing on wall and rack mounts.

All of Comprod Communications filters have two hand movable tuning rods, a coarse and a fine, for a 35% faster tuning capability. Using adjustable silver-plated coupling loops and calibration index label, it easily facilitates setting cavity insertion loss as required for each application.

The combination of heavy-gauge aluminum outer conductor, thick heliarc-welded cavity top plates, heavy silver plating on micro finished tuning assemblies, and Invar-based temperature compensation material results in a constant performance levels and long-term reliability. Cavity and isolator connectors are Type N Female, with silver-plated brass bodies and gold-plated center contacts. Thru-line cable assemblies are made with high-quality connectors and RG-393B/U or RG-214/U Teflon cable, to provide excellent intermodulation performance at high system power levels. Gold-plated cable connectors center contacts are soldered to the cable, and the dual shield is securely crimped to the connector barrel using pneumatic fixtures and precision dies. All of these attributes contribute to the high quality of products to which our clients have become accustomed to.

For more information on Comprod Communications X-Pass, Multicouplers, Duplexers, Pass-Reject, BandPass, or Notch filters, please do not hesitate to contact our Technical Support team at **1.800.603.1454** or **1.450.641.1454**.

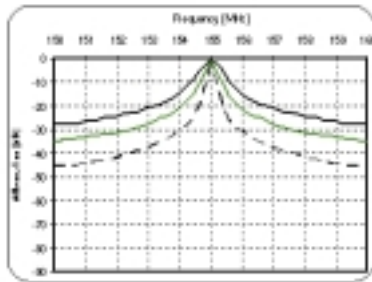
CP60-13-XP Series

Comprod Band Pass VHF Multicoupler filters are designed for minimizing interference from adjacent channels and outside systems. They are available in single, dual, triple or more units. Selectivity can be determined by the insertion loss of the cavity or by adding cavity units as needed. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning applications.

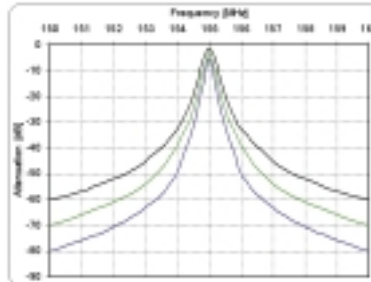


- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems
- **Adjustable Loops**
 - Each cavity has a calibration index for easy field tuning

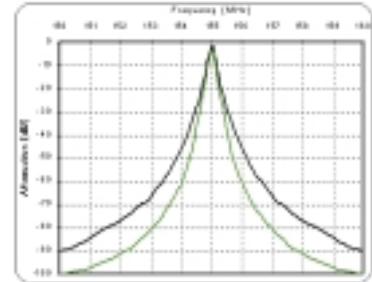
Electrical Specifications	60-13-71	60-13-72	60-13-73
Frequency Range, MHz	138-174	138-174	138-174
Frequency Spacing Min., MHz	0.8	0.8	0.8
Cavity Diameter, inches	6.625	6.625	6.625
Continuous Power Input Dependant on Insertion Loss, Watts	90 - 400	90 - 400	90 - 400
Connectors	N-Female	N-Female	N-Female
Insertion Loss, dB	0.7, 1.2, 3.2	1.2, 2.2, 3.2	1.7, 3.2
Channel Isolation		**** See Curves ****	
VSWR	1.5:1	1.5:1	1.5:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Maximum length, inches	34H x 19W x 7D	34H x 19W x 16.5D	34H x 19W x 16.5D
Weight, lbs (Kg)	30 (13.6)	36.3 (16.5)	44 (20)



60-13-71



60-13-72



60-13-73

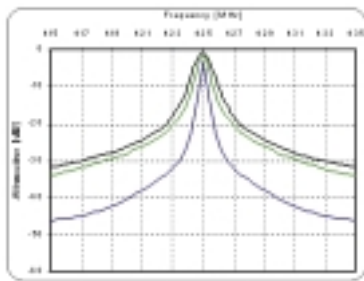
CP60-40-XP Series

Comprod Band Pass UHF Multicoupler filters are designed for minimizing interference from adjacent channels and outside systems. They are available in single, dual, triple or more units. Selectivity can be determined by the insertion loss of the cavity or by adding cavity units as needed. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning applications.

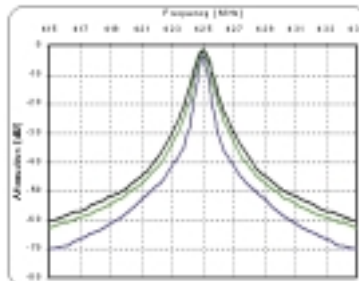
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems
- **Adjustable Loops**
 - Each cavity has a calibration index for easy field tuning



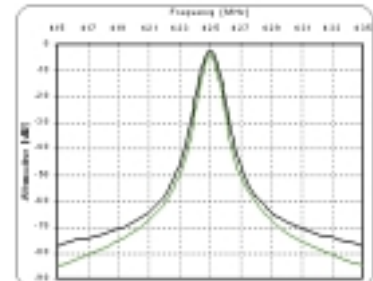
Electrical Specifications	60-40-71	60-40-72	60-40-73
Frequency Range, MHz	406-512	406-512	406-512
Frequency Spacing Min., MHz	0.8	0.8	0.8
Cavity Diameter, inches	6.625	6.625	6.625
Continuous Power Input Dependant on Insertion Loss, Watts	80-300	80-300	80-300
Connectors	N-Female	N-Female	N-Female
Insertion Loss, dB	0.7, 1.2, 3.2	1.2, 2.2	1.7, 3.2
Channel Isolation		**** See Curves ****	
VSWR	1.5:1	1.5:1	1.5:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Maximum length, inches	16H x 19W x 7D	16H x 19W x 16.5D	16H x 19W x 16.5D
Weight, lbs (kg)	18 (8.6)	26 (11.8)	32 (15.2)



60-40-71



60-40-72



60-40-73

PSEUDO BAND PASS DUPLEXER

CP66-FF-74

Comprod Pseudo Band Pass Duplexer filters are designed for quick and easy installations. These filters are designed for combining two frequencies that need extra isolation or used as great pre-selectors. If higher levels of isolation are needed, available in either 4 or 6 cavity configurations. Selectivity can be determined by the field adjustable capacitors. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning applications.

- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems
- **Adjustable Loops**
 - Each cavity has a calibration index for easy field tuning

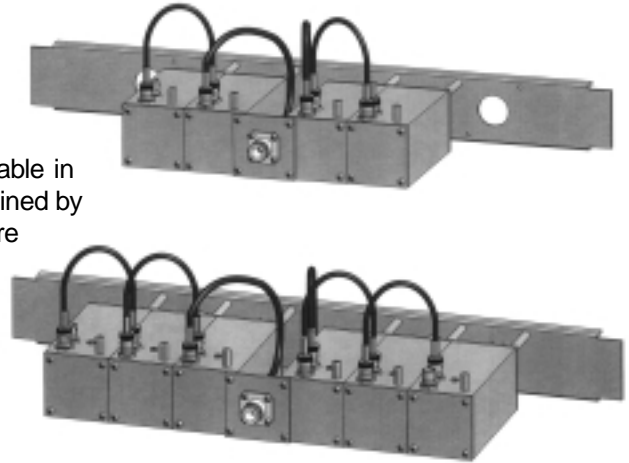


Electrical Specifications	66-13-74	66-40-74
Frequency Range, MHz	138-174	406-512
Frequency Spacing Min., MHz	0.5	1.5
Cavity Diameter, inches	6.625	6.625
Continuous Power Input, Watts	400	350
Connectors	N-Female	N-Female
Insertion Loss, dB	1.5	1.5
Channel Isolation, @ Min. Separation dB	85	90
VSWR	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications		
Maximum length, inches	34H x 19W x 16.5D	18.5H x 19W x 16.5D
Weight, lbs (kg)	44 (20)	32 (15.2)

2-INCH CAVITY DUPLEXERS

CP66-FF-2P Series 2" Cavity Duplexers

Comprod 2" base station duplexers are ideal for quick and easy installations. These filters are designed for combining two frequencies that need extra isolation or used as great pre-selectors. If higher levels of isolation are needed, available in either 4 or 6 cavity configurations. Selectivity can be determined by the field adjustable capacitors. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods.



- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems

Electrical Specifications	66-13-24	66-14-24	66-13-26	66-14-26
Frequency Range, MHz	132-150	144-174	132-150	144-174
Frequency Spacing, Min., MHz	4.5	4.5	3.0	3.0
Cavity Number	4	4	6	6
Cavity Diameter, inches	2.0	2.0	2.0	2.0
Continuous Power Input, Watts	100	100	100	100
Connectors	BNC	BNC	BNC	BNC
Insertion Loss, dB	1.5	1.5	1.5	1.5
Channel Isolation, dB	70	70	80/90	80/90
VSWR	1.3:1		1.3:1	
Temperature	-40°C to +80°C		-40°C to +80°C	
Mechanical Specifications				
Maximum length, inches	5.25H x 19W x 7.25D		5.25H x 19W x 7.25D	
Mounting	19" Rack Mount			

** These duplexers are available in other frequencies and configurations. Please call our technical support for additional models.

4-INCH CAVITY DUPLEXERS

CP66-FF-44 Series (4) 4" Cavity Duplexers

Comprod 4" base station duplexers are ideal for quick and easy installations. These filters are designed for combining two frequencies or used as a pre-selector while using our 6 cavity configurations. If higher levels of isolation are needed, consider at our 6-cavity configurations. Selectivity can be determined by the field adjustable capacitors. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods.

- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems



Electrical Specifications	66-13-44	66-40-44	66-80-44
Frequency Range, MHz	138-174	406-512	746-960
Frequency Spacing Min., MHz	0.5	5	45
Cavity Diameter	(4) - 4" Square	(4) - 4" Square	(4) - 4" Square
Continuous Power Input, Watts	350	125	100
Connectors	N-Female	N-Female	N-Female
Insertion Loss, dB	1.5	0.8	0.8
Channel Isolation @ Min. Sep., dB	70	75	90
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Maximum length, inches	31H x 19W x 4D	4H x 19W x 16.5D	4H x 19W x 14D
Weight, lbs (kg)	30 (13.6)	18 (8.2)	16 (7.3)
Mounting	19" Rack Mount	19" Rack Mount	19" Rack Mount

Order Information	Wall Mount	4 Cavities	6 Cavities	8 Cavities
66-13-44	66-13-44WM	66-13-44	66-13-46	66-13-48
66-40-44	66-40-44WM	66-40-44	66-40-46	66-40-48
66-80-44	66-80-44WM	66-80-44	66-80-46	66-80-48

4-INCH CAVITY DUPLEXERS

CP66-FF-46 Series (6) 4" Cavity Duplexers

These Comprod (6) 4" base station duplexers are ideal for quick and easy installations. These filters are designed for combining two frequencies that need extra isolation or used as a great pre-selectors. If higher levels of isolation are needed, please take a look at our 8-cavity configurations. Selectivity can be determined by the field adjustable capacitors. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods.



- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems

Electrical Specifications	66-13-46	66-40-46	66-80-46
Frequency Range, MHz	138-174	406-512	746-960
Frequency Spacing Min., MHz	0.5	5	3.6
Cavity Diameter	(6)- 4" Square	(6)- 4" Square	(6)- 4" Square
Continuous Power Input, Watts	350	125	100
Connectors	N-Female	N-Female	N-Female
Insertion Loss, dB	1.5	1.2	1.2
Channel Isolation @ Min. Sep., dB	85	85	85
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Maximum length, inches	31H x 19W x 8D	8H x 19W x 16.5D	8H x 19W x 16.5D
Weight, lbs (kg)	45 (20.25)	27 (12.15)	24 (10.8)
Mounting	19" Rack Mount	19" Rack Mount	19" Rack Mount

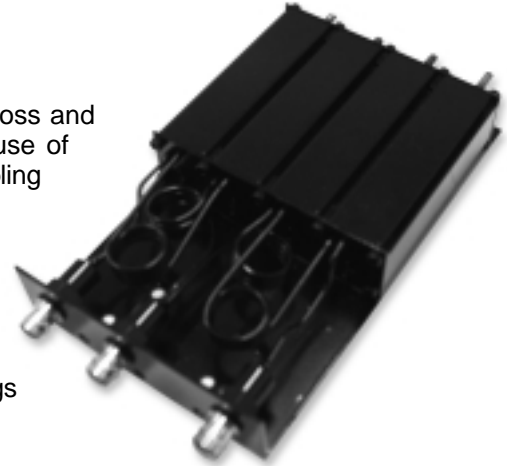
Order Information	Wall Mount	4 Cavities	6 Cavities	8 Cavities
66-13-46	66-13-46WM	66-13-44	66-13-46	66-13-48
66-40-46	66-40-46WM	66-40-44	66-40-46	66-40-48
66-80-46	66-80-46WM	66-80-44	66-80-46	66-80-48

4 Cavity Standard Version

The Comprod line of mobile duplexers features compact size, low loss and temperature compensation over the range of -40C to +60C. The use of extruded aluminum cavities and solid shield copper jacketed intercabling assures excellent mechanical and electrical stability.

All units are field tuneable by qualified personnel and rated at 50 Watts continuous duty with a maximum VSWR of 1.5 : 1 over the entire tuning range.

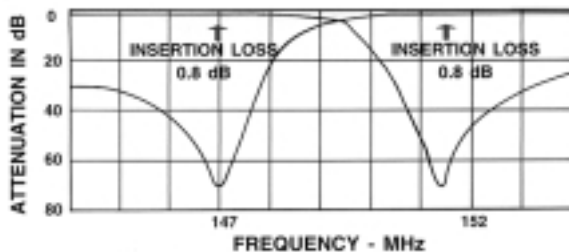
BNC connectors are standard. Variations on connectors and mountings are available on special order.



Electrical Specifications	534-90	504-90	
Frequency Range, MHz	144-174	406-512	
Frequency Separation, MHz	4.5	5	10
Continuous Power Rating, Watts	50	50	50
Insertion Loss - db: TX to Antenna	0.8	1.2	0.8
Insertion Loss - db: RX to Antenna	0.8	1.2	0.8
Isolation - db: TX noise suppression at RX frequency	60	50	60
Isolation - db: TX isolation at TX frequency	60	50	60
Maximum VSWR, Ohms	1.5:1	1.5 : 1	
Impedance, Ohms	50	50	
Connector Type, Female	BNC	BNC	
Temperature Range, °F (°C)	-40°C to +60°C	-40°C to +60°C	
Mechanical Specifications			
Height, inches (mm)	1-1/4 (31.8)	1-1/4 (31.8)	
Width, inches (mm)	4-1/8 (105)	4-1/8 (105)	
Depth, inches (mm)	7-5/8 (194)	8-3/4 (222)	
Weight, lbs (kg)	1.5 (0.7)	2 (0.9)	

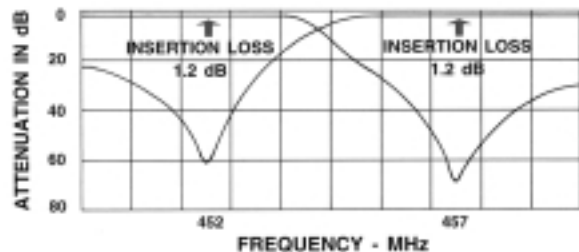
534-90

Typical Response Curve / 4.5 MHz Spacing



504-90

Typical Response Curve / 5.0 MHz Spacing

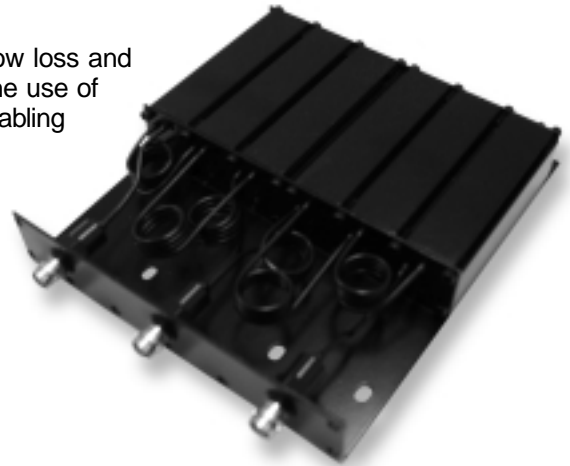


6 Cavity Standard Version

The Comprod line of mobile duplexers features compact size, low loss and temperature compensation over the range of -40°C to +60°C. The use of extruded aluminum cavities and solid shield copper jacketed intercabling assures excellent mechanical and electrical stability.

All units are field tuneable by qualified personnel and rated at 50 Watts continuous duty with a maximum VSWR of 1.5 : 1 over the entire tuning range.

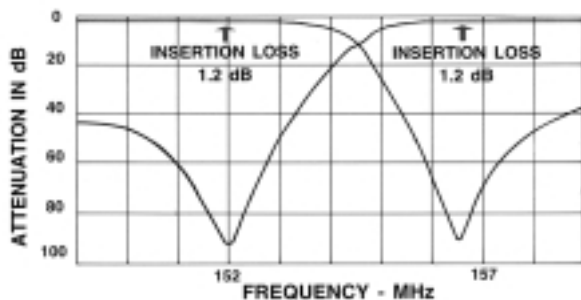
BNC connectors are standard. Variations on connectors and mountings are available on special order.



Electrical Specifications	536-90	506-90	
Frequency Range, MHz	144-174	406-512	
Frequency Separation, MHz	4.5	5	10
Continuous Power Rating, Watts	50	50	50
Insertion Loss - db: TX to Antenna	1.2	1.4	1.2
Insertion Loss - db: RX to Antenna	1.2	1.4	1.2
Isolation - db: TX noise suppression at RX frequency	80	75	80
Isolation - db: TX isolation at TX frequency	80	75	80
Maximum VSWR, Ohms	1.5:1	1.5 : 1	
Impedance, Ohms	50	50	
Connector Type, Female	BNC	BNC	
Temperature Range	-40°C to +60°C	-40°C to +60°C	
Mechanical Specifications			
Height, inches (mm)	1-1/4 (31.8)	1-1/4 (31.8)	
Width, inches (mm)	6-3/16 (157)	6-3/16 (157)	
Depth, inches (mm)	7-5/8 (222)	8-3/4 (222)	
Weight, lbs (kg)	2.0 (0.9)	3.5 (1.7)	

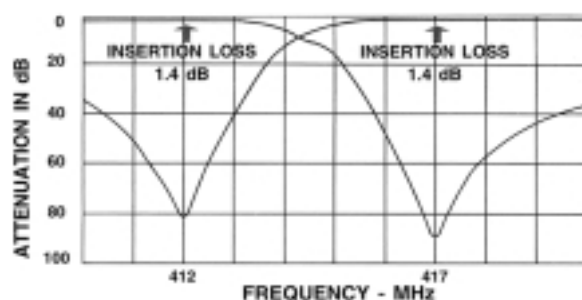
536-90

Typical Response Curve / 4.5 MHz Spacing



506-90

Typical Response Curve / 5.0 MHz Spacing



X-PASS **Expandable Multicoupler/Combiner Filters**

The Next Generation of Filtration

The X-Pass system is one of the most innovative filter designs available today. The X-Pass configuration has already been used by the CREST project at Mount Douglas (B.C.), Hydro Quebec, NB DOT, Motorola Systems, and multiple projects in Canada, the U.S.A and internationally. With the properties of a combiner, but the expandability of a multicoupler, our X-Pass filters is one of the most versatile and re-usable filtration systems on the market.

The X-Pass transmitter multicoupler/combiner has superior expandability over fixed star junction type configurations. The X-Pass system can be expanded one channel at a time or up to 21 channels with factory-tuned, easy-to-install expansion channel assemblies. Expansion can be completed easily, without modifying the existing system, as easy as adding one or many channels on top of the existing system, (daisy chain).

The X-Pass system is a broadband design allowing the system to completely span entire frequency ranges by using the properties of the X-Pass's combiner for close frequency spacing and the X-Pass's multicoupler properties for the normally spaced channels. The X-Pass can span the full 138-174MHz, 406-512MHz, 806-960MHz frequencies with ease. With a 6.625" cavity, Tx-Tx in VHF can be as close to 75KHz in frequency separation or 50KHz using 10" cavities.

The X-Pass system has the big advantage of being flexible. With the ability to combine Bandpass, Pass-Reject, or Notch 6.625" & 10" cavity filters within the X-Pass configuration, once difficult duplex operating requirements can be easily resolved with any customized design. This allows the X-Pass system to have unlimited combinations that can be integrated using multi-cavity configurations, while retaining the expandability of the X-Pass combiner properties for close frequency spaced channels using 6.625" and 10" cavities. Your system can now be a hybrid, part combiner for close frequency spaced channels while encompassing the expandability of part standard multicouplers that can be integrated with standard Bandpass, Notch, and Pass-Reject filter combinations. All X-Pass systems are fully assembled, ready for Bolt, Plug, and then Play installations.

The X-Pass system has one more beneficial aspect, the optional X-Pass Rack. With this ingenious rack design, some systems can take up to 50% less space than normal systems in a 19-inch rack. Even our Stak Rak cannot compete with the efficiencies of the X-Pass Rack. By being able to mount all cavities horizontally, the ability to expand one channel on top of another in no particular order, and not having the physical obstacles of mounting a star-junction type configuration in a rack, the X-Pass system can save valuable installation space, that in most cases, is a premium, especially for future expansion projects.

For more information on Comprod Communications X-Pass, Multicouplers, Duplexers, Pass-Reject, BandPass, or Notch filters, please do not hesitate to contact our Technical Support team at **1.800.603.1454** or **1.450.641.1454**.

CP68-XX-7X Series

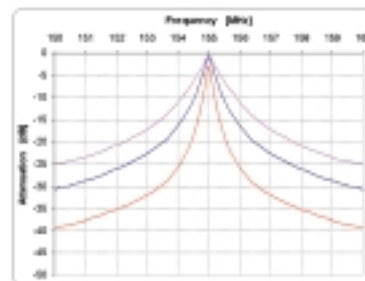
Comprod X-Pass filters are designed for flexible, close frequency systems. Each cavity contains both a reject and Pass Band curve. These individual cavities are used to add channels to already existing systems. They are only available in single units, but can be combined with Band Pass, Notch, and Pass Reject cavities for added protection and isolation. Selectivity can be determined by the insertion loss of the cavity or by adding Band Pass cavity units after this Expansion channel as needed. Each cavity is temperature compensated for operation between -40°C to +60°C. Each cavity has a gold alodine finish, silver plated loops, and plated tuning rods. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning applications.



- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference from adjacent systems
- **Adjustable Loops**
 - Each cavity has a calibration index for easy field tuning

Electrical Specifications	68-03-71	68-06-71	68-11-71	68-13-71	68-40-71	68-74-71
Frequency Range, MHz	30-40	66-88	118-136	136-174	406-512	746-960
Frequency Spacing Min.	**** Please Refer To Curves ****					
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
Insertion Loss	**** Please Refer To Curves ****					
Reject Attenuation	**** Please Refer To Curves ****					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications						
Maximum length, inches	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single Cavity
4" Cavity	68-XX-41
6.625" Cavity	68-XX-71
10" Cavity	68-XX-01

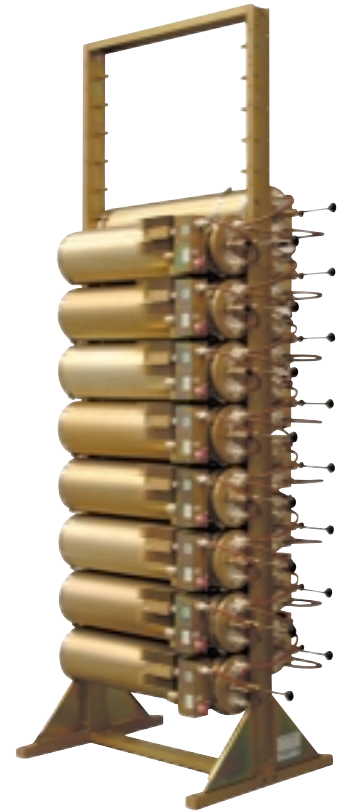


68-13-71

FILTERS

XTC – Xpandable Transmit Combiner Series – 7" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 50KHz Tx-Tx spacing or 50KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
- **Expandable 1 or more Channels at a time**
 - Re-Configurable Equipment
 - 66-88MHz, 22MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-06-72	XTC-06-74	XTC-06-76	XTC-06-78	XTC-07-10	XTC-07-12
Frequency Range, MHz	66-88	66-88	66-88	66-88	66-88	66-88
Bandwidth, MHz	22	22	22	22	22	22
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., KHz	50	50	50	50	50	50
Isolation Min. Tx-Tx, dB	70	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.7	5.5	6	6.3	6.8	7.3
Continuous Power Input, Watts	100	100	100	100	100	100
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications						
Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 40.25D (1659 x 610 x 1022)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

Order Information	Single Cavity	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-06-41	XTC-06-42	XTC-06-43	XTC-06-45	XTC-06-48
6.625" Cavity	XTC-06-71	XTC-06-72	XTC-06-73	XTC-06-75	XTC-06-78
10" Cavity	XTC-06-01	XTC-06-02	XTC-06-03	XTC-06-05	XTC-06-08

FILTERS

XTC – Xpandable Transmit Combiner Series – 10" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 50KHz Tx-Tx spacing or 50KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.

- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 66-88MHz, 22MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7



Electrical Specifications	XTC-06-02	XTC-06-04	XTC-06-06	XTC-06-08	XTC-06-10
Frequency Range, MHz	66-88	66-88	66-88	66-88	66-88
Bandwidth, MHz	22	22	22	22	22
Number of Channels	2	4	6	8	10
Cavity Diameter, inches	10	10	10	10	10
Min. Channel Sep., KHz	50	50	50	50	50
Isolation Min. Tx-Tx, dB	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	3.8	4.9	5.2	5.4	5.6
Continuous Power Input, Watts	100	100	100	100	100
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

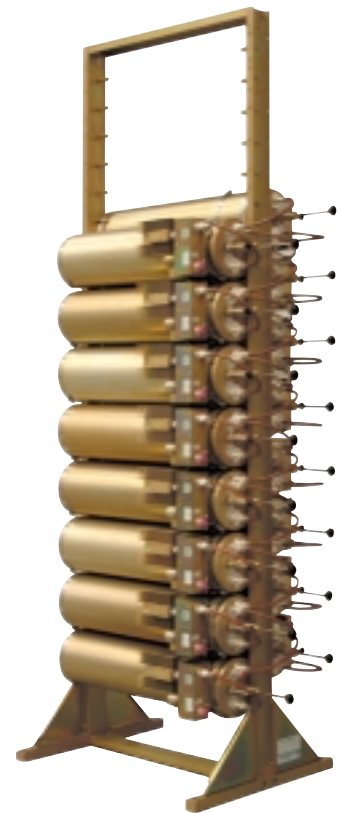
Mechanical Specifications

Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 40.25D (1659 x 610 x 1022)				
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****				

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-06-41	XTC-06-42	XTC-06-43	XTC-06-45	XTC-06-48
6,625" Cavity	XTC-06-71	XTC-06-72	XTC-06-73	XTC-06-75	XTC-06-78
10" Cavity	XTC-06-01	XTC-06-02	XTC-06-03	XTC-06-05	XTC-06-08

XTC – Xpandable Transmit Combiner Series – 7" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75KHz Tx-Tx spacing or 50KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 108-136MHz, 28MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-11-72	XTC-11-74	XTC-11-76	XTC-11-78	XTC-11-7-10	XTC-11-7-12
Frequency Range, MHz	108-136	108-136	108-136	108-136	108-136	108-136
Bandwidth, MHz	28	28	28	28	28	28
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., dB	75	75	75	75	75	75
Isolation Min. Tx-Tx, dB	70	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	3.6	4.5	4.8	5.2	5.4	5.6
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications						
Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 40.25D (1659 x 610 x 1022)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-10-41	XTC-10-42	XTC-10-43	XTC-10-45	XTC-10-48
6,625" Cavity	XTC-10-71	XTC-10-72	XTC-10-73	XTC-10-75	XTC-10-78
10" Cavity	XTC-10-01	XTC-10-02	XTC-10-03	XTC-10-05	XTC-10-08

XTC – Xpandable Transmit Combiner Series – 10" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75KHz Tx-Tx spacing or 50KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 108-136MHz, 28MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-11-02	XTC-11-04	XTC-11-06	XTC-11-08	XTC-11-0-10	XTC-11-0-12
Frequency Range, MHz	108-136	108-136	108-136	108-136	108-136	108-136
Bandwidth, MHz	28	28	28	28	28	28
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	10	10	10	10	10	10
Min. Channel Sep., dB	50	50	50	50	50	50
Isolation Min. Tx-Tx, dB	70	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60	6
Max. Insertion Loss Per Chan., dB	4.1	4.8	5.1	5.4	5.6	5.7
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

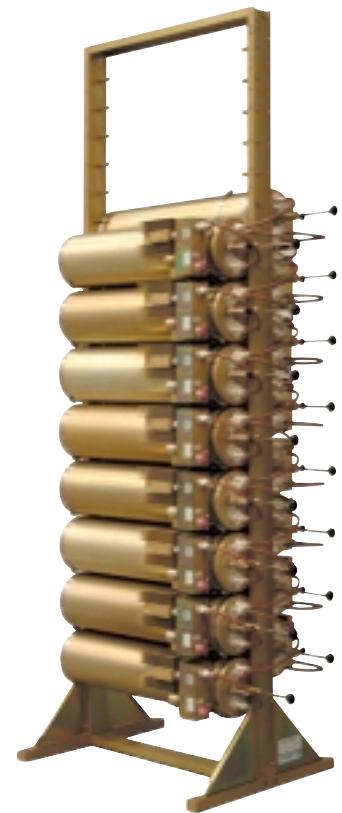
Mechanical Specifications						
Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 40.25D (1659 x 610 x 1022)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-10-41	XTC-10-42	XTC-10-43	XTC-10-45	XTC-10-48
6,625" Cavity	XTC-10-71	XTC-10-72	XTC-10-73	XTC-10-75	XTC-10-78
10" Cavity	XTC-10-01	XTC-10-02	XTC-10-03	XTC-10-05	XTC-10-08

FILTERS

XTC – Xpandable Transmit Combiner Series – 7" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75KHz Tx-Tx spacing or 50KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 132-174MHz, 42MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-13-72	XTC-13-74	XTC-13-76	XTC-13-78	XTC-13-7-10	XTC-13-7-17
Frequency Range, MHz	132-174	132-174	132-174	132-174	132-174	132-174
Bandwidth, MHz	42	42	42	42	42	42
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., dB	75	75	75	75	75	75
Isolation Min. Tx-Tx, dB	70	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.3	5.4	5.8	6.2	6.5	6.7
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications						
Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 40.25D (1659 x 610 x 1022)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-13-41	XTC-13-42	XTC-13-43	XTC-13-45	XTC-13-48
6,625" Cavity	XTC-13-71	XTC-13-72	XTC-13-73	XTC-13-75	XTC-13-78
10" Cavity	XTC-13-01	XTC-13-02	XTC-13-03	XTC-13-05	XTC-13-08

XTC – Xpandable Transmit Combiner Series – 10" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75KHz Tx-Tx spacing or 50KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.

- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 132-174MHz, 42MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7



Electrical Specifications	XTC-13-02	XTC-13-04	XTC-13-06	XTC-13-08	XTC-13-0-10	XTC-13-0-12
Frequency Range, MHz	132-174	132-174	132-174	132-174	132-174	132-174
Bandwidth, MHz	42	42	42	42	42	42
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	10	10	10	10	10	10
Min. Channel Sep., KHz	50	50	50	50	50	50
Isolation Min. Tx-Tx, dB	70	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.1	5.0	5.4	5.7	5.9	6.1
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

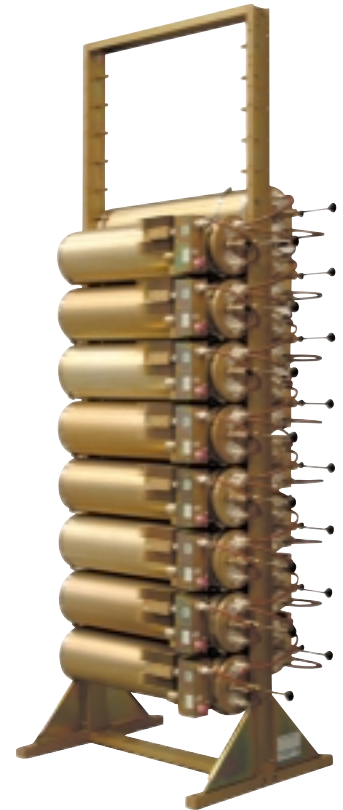
Mechanical Specifications

Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 40.25D (1659 x 610 x 1022)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

Order Information	Single Cavity	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-06-41	XTC-06-42	XTC-06-43	XTC-06-45	XTC-06-48
6,625" Cavity	XTC-06-71	XTC-06-72	XTC-06-73	XTC-06-75	XTC-06-78
10" Cavity	XTC-06-01	XTC-06-02	XTC-06-03	XTC-06-05	XTC-06-08

XTC – Xpandable Transmit Combiner Series – 7" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 100KHz Tx-Tx spacing or 75KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 215-300MHz, 85MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-22-72	XTC-22-74	XTC-22-76	XTC-22-78	XTC-22-7-10	XTC-22-7-12
Frequency Range, MHz	215-300	215-300	215-300	215-300	215-300	215-300
Bandwidth, MHz	85	85	85	85	85	85
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., dB	100	100	100	100	100	100
Isolation Min. Tx-Tx, dB	70	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.1	4.5	5.1	5.4	5.6	5.8
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications						
Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 26.4D (1659 x 610 x 671)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK SIZE ****					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-22-41	XTC-22-42	XTC-22-43	XTC-22-45	XTC-22-48
6,625" Cavity	XTC-22-71	XTC-22-72	XTC-22-73	XTC-22-75	XTC-22-78
10" Cavity	XTC-22-01	XTC-22-02	XTC-22-03	XTC-22-05	XTC-22-08

XTC – Xpandable Transmit Combiner Series – 10" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 125KHz Tx-Tx spacing or 75KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 215-300MHz, 85MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-22-02	XTC-22-04	XTC-22-06	XTC-22-08	XTC-22-0-10	XTC-22-0-12
Frequency Range, MHz	215-300	215-300	215-300	215-300	215-300	215-300
Bandwidth, MHz	85	85	85	85	85	85
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	10	10	10	10	10	10
Min. Channel Sep., dB	75	75	75	75	75	75
Isolation Min. Tx-Tx, dB	70	70	70	70	70	70
Isolation Min. Ant-Tx, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.2	5.1	5.5	5.8	6	6.2
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

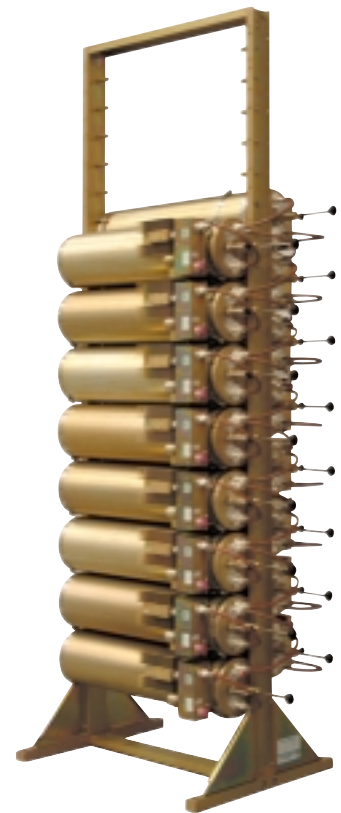
Mechanical Specifications	
Height, inches (mm) - (Mounted in X Rack)	79.5H x 24W x 28.4D (2019 x 610 x 721)
Mounts in 19" Standard Rack	Yes Yes Yes Yes Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-22-41	XTC-22-42	XTC-22-43	XTC-22-45	XTC-22-48
6,625" Cavity	XTC-22-71	XTC-22-72	XTC-22-73	XTC-22-75	XTC-22-78
10" Cavity	XTC-22-01	XTC-22-02	XTC-22-03	XTC-22-05	XTC-22-08

FILTERS

XTC – Xpandable Transmit Combiner Series – 7" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 125KHz Tx-Tx spacing or 75KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 380-512MHz, 132MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-38-72	XTC-38-74	XTC-38-76	XTC-38-78	XTC-38-7-10	XTC-38-7-12
Frequency Range, MHz	380-512	380-512	380-512	380-512	380-512	380-512
Bandwidth, MHz	132	132	132	132	132	132
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., dB	125	125	125	125	125	125
Isolation Min. Tx-Tx, dB	80	80	80	80	80	80
Isolation Min. Ant-Tx, dB	70	70	70	70	70	70
Max. Insertion Loss Per Chan., dB	4.1	5.2	5.7	6.0	6.2	6.4
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications						
Height, inches (mm) - (Mounted in X Rack)	65.25H x 24W x 36D (1659 x 610 x 914)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

* Using 3/4 wave cavity configuration (available in 1/4 wave configuration).

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-38-41	XTC-38-42	XTC-38-43	XTC-38-45	XTC-38-48
6,625" Cavity	XTC-38-71	XTC-38-72	XTC-38-73	XTC-38-75	XTC-38-78
10" Cavity	XTC-38-01	XTC-38-02	XTC-38-03	XTC-38-05	XTC-38-08

XTC – Xpandable Transmit Combiner Series – 10" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 125KHz Tx-Tx spacing or 75KHz spacing while using 10" cavities. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.



- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 380-512MHz, 132MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7

Electrical Specifications	XTC-38-02	XTC-38-04	XTC-38-06	XTC-38-78	XTC-38-07-10	XTC-38-0-12
Frequency Range, MHz	380-512	380-512	380-512	380-512	380-512	380-512
Bandwidth, MHz	132	132	132	132	132	132
Number of Channels	2	4	6	8	10	12
Cavity Diameter, inches	10	10	10	10	10	10
Min. Channel Sep., dB	75	75	75	75	75	75
Isolation Min. Tx-Tx, dB	80	80	80	80	80	80
Isolation Min. Ant-Tx, dB	70	70	70	70	70	70
Max. Insertion Loss Per Chan., dB	4.3	5.4	6.0	6.6	6.9	7.1
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications						
Height, inches (mm) - (Mounted in X Rack)	79.5H x 24W x 36D (2019 x 610 x 914)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

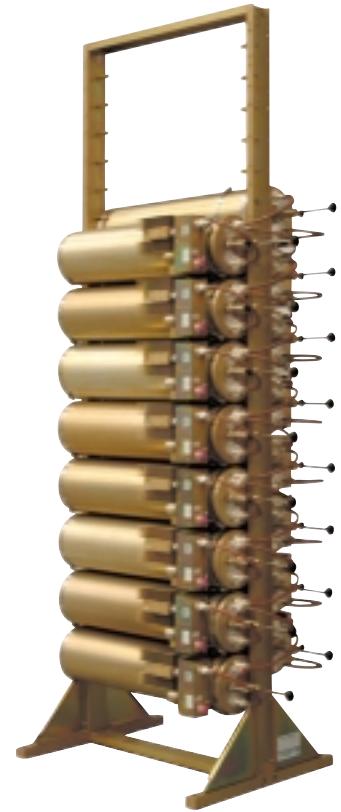
Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-38-41	XTC-38-42	XTC-38-43	XTC-38-45	XTC-38-48
6,625" Cavity	XTC-38-71	XTC-38-72	XTC-38-73	XTC-38-75	XTC-38-78
10" Cavity	XTC-38-01	XTC-38-02	XTC-38-03	XTC-38-05	XTC-38-08

FILTERS

XTC – Xpandable Transmit Combiner Series – 7" Cavity

The XTC is the newest evolution of our X-Pass technology. Our Xpandable Transmit Combiners can combine 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 250KHz Tx-Tx spacing. Each cavity is constructed using a gold alodine finish, silver plated loops, silver plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40°C to +60°C. Every cavity is equipped with a coarse and fine tuning rod for quick and easy field or lab re-tuning.

- **Flexible & Expandable Design**
 - 1-21 Channels Capacity
 - Expandable 1 or more Channels at a time
 - Re-Configurable Equipment
 - 746-1000MHz, 256MHz of Operating Bandwidth
- **Temperature Compensation**
 - Assures Frequency Stability
- **High Attenuation**
 - Minimizes Decense and interference
- **Ultra-Low Insertion Losses**
 - Low coupling Losses
 - Low bridging Losses
- **Continuous High Power Handling Capability**
 - 150 Watts – 24/7



Electrical Specifications	XTC-74-02	XTC-74-04	XTC-74-06	XTC-74-78	XTC-74-7-10	XTC-74-7-12
Frequency Range, MHz	746-1000	746-1000	746-1000	746-1000	746-1000	746-1000
Bandwidth, MHz	254	254	254	254	254	254
Number of Channels	2	4	5	8	10	12
Cavity Diameter, inches	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., KHz	250	250	250	250	250	250
Isolation Min. Tx-Tx, dB	80	80	80	80	80	80
Isolation Min. Ant-Tx, dB	70	70	70	70	70	70
Max. Insertion Loss Per Chan.	3.1	4.1	4.4	4.9	5.2	5.5
Continuous Power Input	150	150	150	150	150	150
Connectors	N-Female	N-Female	N-Female	N-Female	N-Female	N-Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications

Height, inches (Mounted in X Rack)	65.25H x 24W x 20.7D (1659 x 610 x 526)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	**** DEPENDS ON SET-UP AND RACK DESIGN ****					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-74-41	XTC-74-42	XTC-74-43	XTC-74-45	XTC-74-48
6,625" Cavity	XTC-74-71	XTC-74-72	XTC-74-73	XTC-74-75	XTC-74-78
10" Cavity	XTC-74-01	XTC-74-02	XTC-74-03	XTC-74-05	XTC-74-08

XTR XPANDABLE TRANSMIT RECEIVER

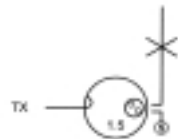
The Next Generation of Filtration

Our X-Pass technology has been taken to the next level. We can now combine your Tx & Rx frequencies onto the same antenna. Our System Design Department can integrate any type of frequency, even in close frequency spaced systems, allowing you to minimize the systems physical space, maximize the efficiency of your system, and combine your Txs and Rxs onto one antenna.

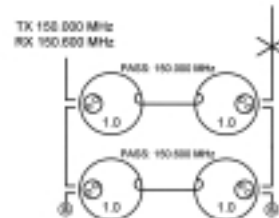
Each of our system designs come with a full intermodulation study that examines all of the Intermod hits that you would have in your system and even within the tower. Once we have fully examined your intermodulation study, we proceed with a fully customized system solution specific to your needs. There are no box solutions packaged for your needs, all of our solutions are custom tailored to your exact applications requirements.

Call now for your free customized system. Tx and Rx frequencies will be needed.

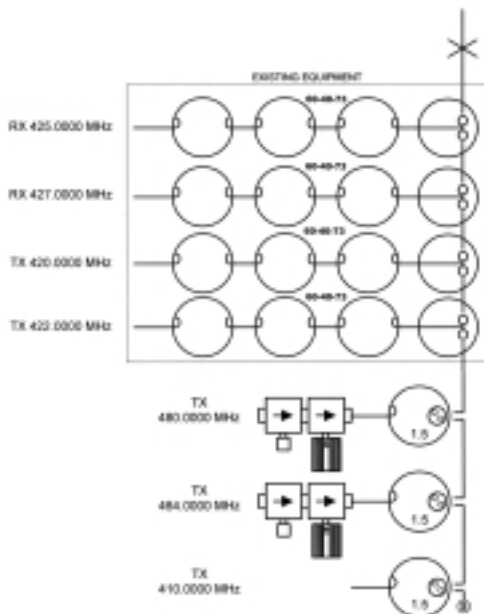
Here are some examples:



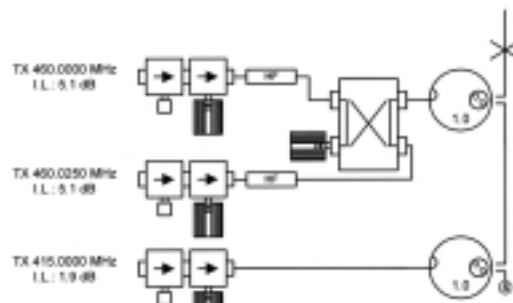
Filter 1



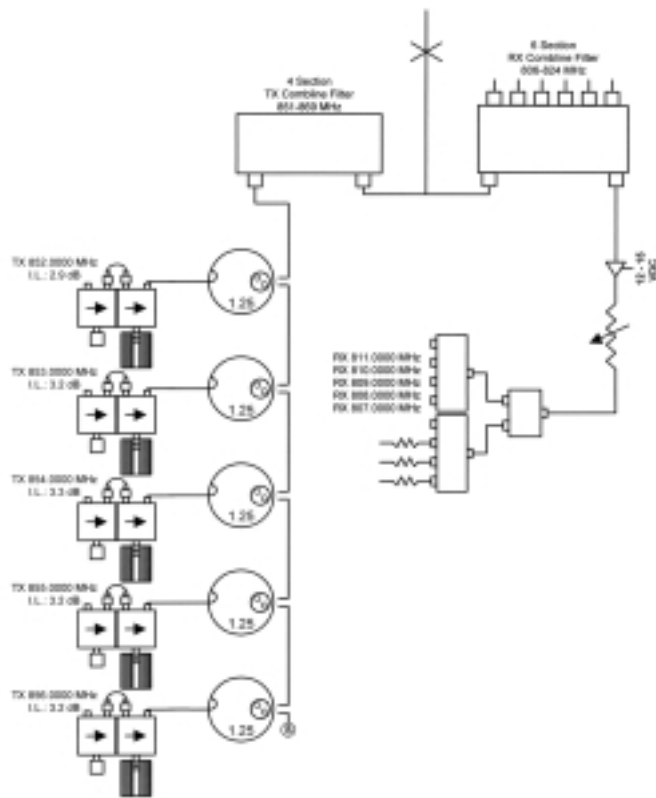
Filter 3



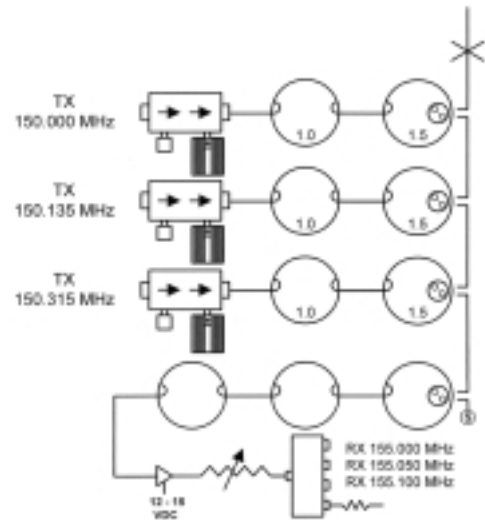
Filter 2



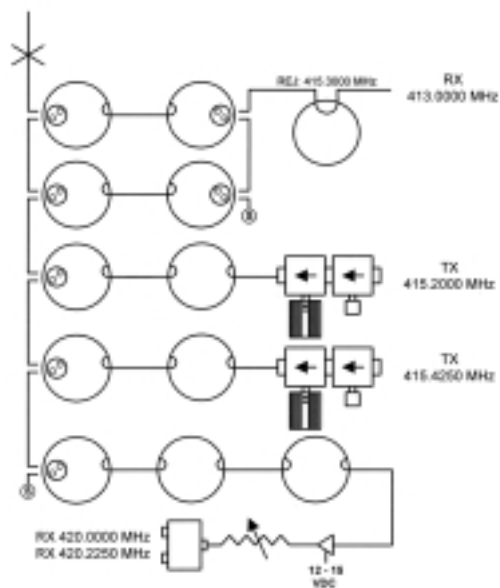
Filter 4



Filter 5



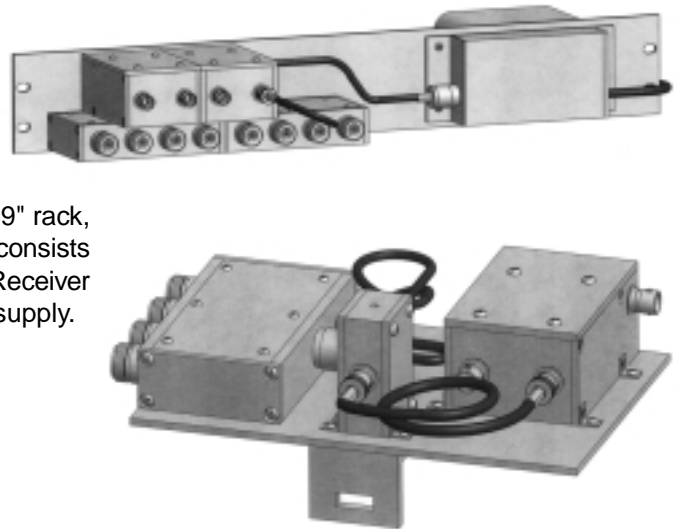
Filter 6



Filter 7

CP XRM-FF-PP Series

Comprod Xpandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12, and 16 port configurations. This is an affordable means of combining multiple Rx frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, a tray-mounted and a cavity-mounted version. Each unit consists of a power splitter and an RF amplifier. Every Xpandable Receiver multicouplers has the available optional plug-in power supply.



- **Design**
 - Simple and Cost Effective
- **Mounting**
 - 19" Rack Mount (RM)
 - Cavity Mount (CM)
 - Tray Mount (TRM)
- **Optional Power Supply (PS)**

Electrical Specifications	XRM-13-02	XRM-13-04	XRM-13-08	XRM-13-16
Frequency Range, MHz	138-225	138-225	138-225	138-225
Pass Band, MHz	3-8	3-8	3-8	3-8
# of Channels	2	4	8	16
Rx/Rx Isolation, dB	20+	20+	20+	20+
System Voltage, VDC	12-15	12-15	12-15	12-15
Amplifier Gain, dB	30+	30+	30+	30+
Amplifier Noise Figure, dB	3.0	3.0	3.0	3.0
Amplifier Bias Voltage, VDC	13.6	13.6	13.6	13.6
Amplifier Current Draw, mA	200	200	200	200
Nominal Impedance, Ohms	50	50	50	50
Max. VSWR	1.25:1	1.25:1	1.25:1	1.25:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

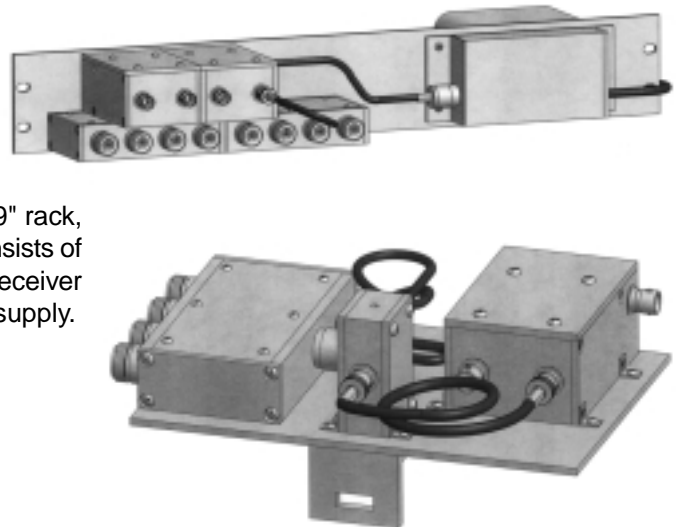
Mechanical Specifications				
Mounting	RM / CM	RM / CM	RM / CM	RM / CM
Connectors	BNC / N	BNC / N	BNC / N	BNC / N
Weight, lbs	12	12	12	12

Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-13-02	XRM-13-02RM	XRM-13-02CM	XRM-13-02TRM	XRM-13-02PS
XRM-13-04	XRM-13-04RM	XRM-13-04CM	XRM-13-04TRM	XRM-13-04PS
XRM-13-08	XRM-13-08RM	XRM-13-08CM	XRM-13-08TRM	XRM-13-08PS
XRM-13-16	XRM-13-16RM	XRM-13-16CM	XRM-13-16TRM	XRM-13-16PS

FILTERS

CP XRM-FF-PP Series

Comprod Xpandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12, and 16 port configurations. This is an affordable means of combining multiple Rx frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, tray mounted and a cavity mounted version. Each unit consists of a power splitter and an RF amplifier. Every Xpandable Receiver Multicouplers has the available optional plug-in power supply.



- **Design**
 - Simple and Cost Effective
- **Mounting**
 - 19" Rack Mount (RM)
 - Cavity Mount (CM)
 - Tray Mount (TRM)
- **Optional Power Supply (PS)**

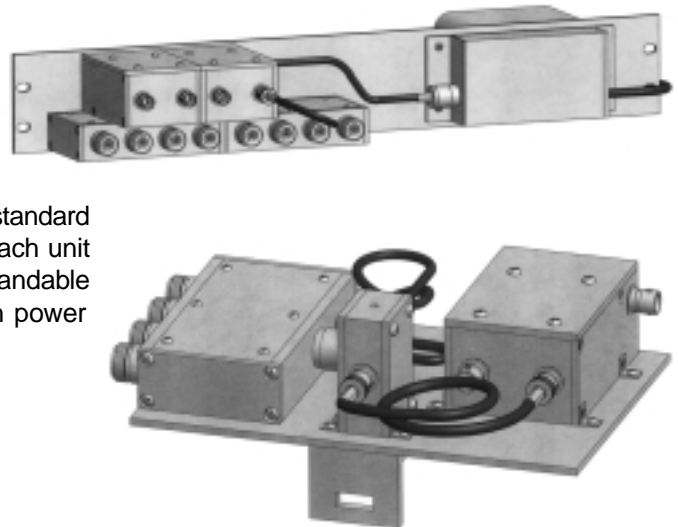
Electrical Specifications	XRM-30-02	XRM-30-04	XRM-30-08	XRM-30-16
Frequency Range, MHz	300-512	300-512	300-512	300-512
Pass Band, MHz	3-10	3-10	3-10	3-10
# of Channels	2	4	8	16
Rx/Rx Isolation, dB	23+	23+	23+	23+
System Voltage, VDC	12-15	12-15	12-15	12-15
Amplifier Gain, dB	30+	30+	30+	30+
Amplifier Noise Figure, dB	3.0	3.0	3.0	3.0
Amplifier Bias Voltage, VDC	13.6	13.6	13.6	13.6
Amplifier Current Draw, mA	200	200	200	200
Nominal Impedance, Ohms	50	50	50	50
Max. VSWR	1.25:1	1.25:1	1.25:1	1.25:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications				
Mounting	RM / CM	RM / CM	RM / CM	RM / CM
Connectors (Input / Output)	BNC / N	BNC / N	BNC / N	BNC / N
Weight, lbs	12	12	12	12

Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-30-02	XRM-30-02RM	XRM-30-02CM	XRM-30-02TRM	XRM-30-02PS
XRM-30-04	XRM-30-04RM	XRM-30-04CM	XRM-30-04TRM	XRM-30-04PS
XRM-30-08	XRM-30-08RM	XRM-30-08CM	XRM-30-08TRM	XRM-30-08PS
XRM-30-16	XRM-30-16RM	XRM-30-16CM	XRM-30-16TRM	XRM-30-16PS

CP XRM-FF-PP Series

Comprod Xpandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12, and 16 port configurations. This is an affordable means of combining multiple Rx frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, tray mounted and a cavity mounted version. Each unit consists of a power splitter and an RF amplifier. Every Xpandable Receiver multicouplers has the offered optional plug-in power supply.



- **Design**
 - Simple and Cost Effective
- **Mounting**
 - 19" Rack Mount(RM)
 - Cavity Mount (CM)
 - Tray Mount (TM)
- **Optional Power Supply (PS)**

Electrical Specifications	XRM-80-02	XRM-80-04	XRM-80-08	XRM-80-16	XRM-80-32
Frequency Range, MHz	806-896	806-896	806-896	806-896	806-896
Pass Band, MHz	3-18	3-18	3-18	3-18	3-18
# of Channels	2	4	8	16	32
Rx/Rx Isolation, dB	23+	23+	23+	23+	23+
System Voltage, VDC	12-15	12-15	12-15	12-15	12-15
Amplifier Gain, dB	28+	28+	28+	30+	30+
Amplifier Noise Figure, dB	3.0	3.0	3.0	3.0	3.0
Amplifier Bias Voltage, VDC	13.6	13.6	13.6	13.6	13.6
Amplifier Current Draw, mA	200	200	200	200	200
Nominal Impedance, Ohms	50	50	50	50	50
Max. VSWR	1.25:1	1.25:1	1.25:1	1.25:1	1.25:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

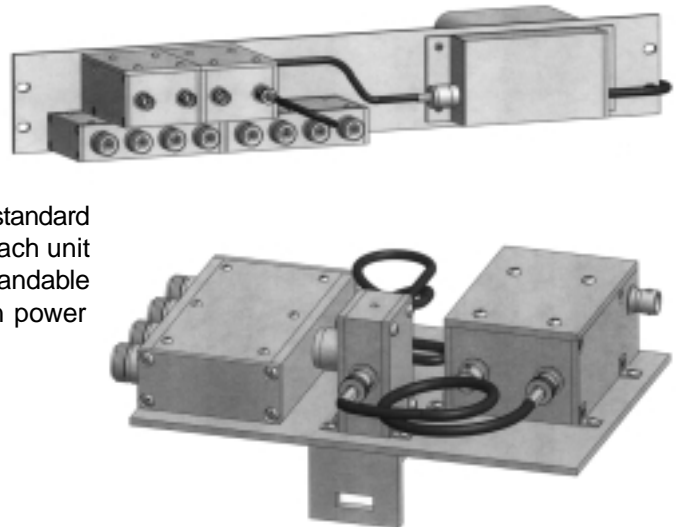
Mechanical Specifications					
Mounting	RM / CM	RM / CM	RM / CM	RM / CM	RM / CM
Connectors	BNC / N	BNC / N	BNC / N	BNC / N	BNC / N
Weight, lbs	12	12	12	12	12

Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-80-02	XRM-80-02RM	XRM-80-02CM	XRM-80-02TRM	XRM-80-02PS
XRM-80-04	XRM-80-04RM	XRM-80-04CM	XRM-80-04TRM	XRM-80-04PS
XRM-80-08	XRM-80-08RM	XRM-80-08CM	XRM-80-08TRM	XRM-80-08PS
XRM-80-16	XRM-80-16RM	XRM-80-16CM	XRM-80-16TRM	XRM-80-16PS

FILTERS

CP XRM-FF-PP Series

Comprod Xpandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12, and 16 port configurations. This is an affordable means of combining multiple Rx frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, tray mounted and a cavity mounted version. Each unit consists of a power splitter and an RF amplifier. Every Xpandable Receiver multicouplers has the offered optional plug-in power supply.



- **Design**
 - Simple and Cost Effective
- **Mounting**
 - 19" Rack Mount (RM)
 - Cavity Mount (CM)
 - Tray Mount (TRM)
- **Optional Power Supply (PS)**

Electrical Specifications	XRM-90-02	XRM-90-04	XRM-90-08	XRM-90-16	XRM-90-32
Frequency Range, MHz	896-960	896-960	896-960	896-960	896-960
Pass Band, MHz	3-15	3-15	3-15	3-15	3-15
# of Channels	2	4	8	16	32
Rx/Rx Isolation, dB	23+	23+	23+	23+	23+
System Voltage, VDC	12-15	12-15	12-15	12-15	12-15
Amplifier Gain, dB	28+	28+	28+	28+	28+
Amplifier Noise Figure, dB	3.0	3.0	3.0	3.0	3.0
Amplifier Bias Voltage, VDC	13.6	13.6	13.6	13.6	13.6
Amplifier Current Draw, mA	200	200	200	200	200
Nominal Impedance, Ohms	50	50	50	50	50
Max. VSWR	1.25:1	1.25:1	1.25:1	1.25:1	1.25:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications					
Mounting	RM / CM	RM / CM	RM / CM	RM / CM	RM / CM
Connectors	BNC / N	BNC / N	BNC / N	BNC / N	BNC / N
Weight, lbs	12	12	12	12	12

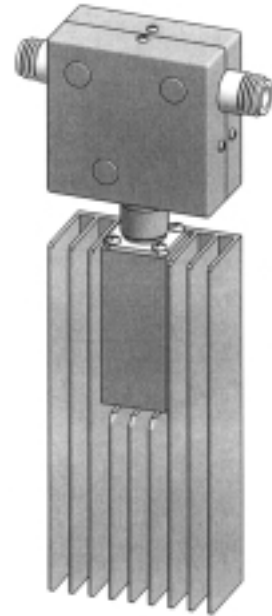
Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-90-02	XRM-90-02RM	XRM-90-02CM	XRM-90-02TRM	XRM-90-02PS
XRM-90-04	XRM-90-04RM	XRM-90-04CM	XRM-90-04TRM	XRM-90-04PS
XRM-90-08	XRM-90-08RM	XRM-90-08CM	XRM-90-08TRM	XRM-90-08PS
XRM-90-16	XRM-90-16RM	XRM-90-16CM	XRM-90-16TRM	XRM-90-16PS

LOW POWER SINGLE ISOLATORS

CP LP21-FF-PP

These Isolators are some of the best in the industry for blocking the transfer of RF power flow in the opposite direction. Low-Medium Power, and total reliability, are some of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from back power, and providing extra isolation are just a few of the applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 Watt combinations, as well as combined with 2nd Harmonic filters for Hybrid Combiners, HTC'S.

- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band



Electrical Specifications	21-13-XX	21-40-XX	21-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	100	100	100
Connectors	N-Female	N-Female	N-Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	30	30	30
Typical Insertion Loss, dB	0.45	0.35	0.25
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Dimensions, inches	3.94H x 3.75W x 1.78D	4.19H x 3.99W x 1.78D	5.63H x 3.15W x 1.84D
Weight, lbs	1.40	1.41	1.32
Mounting	**** Cavity / Plate / Cabinet / Rack Mount Are All Available ****		

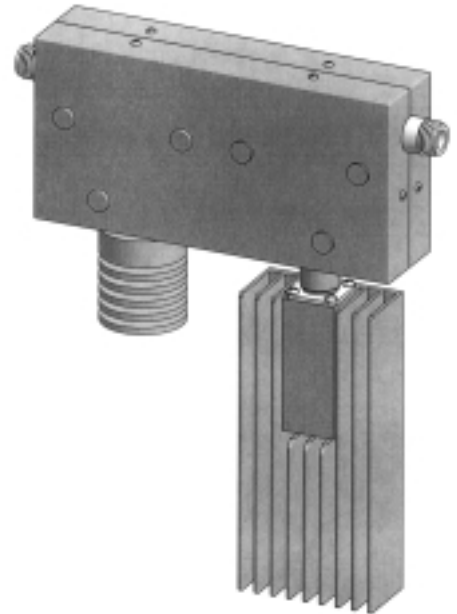
Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
21-13-XX	21-13-05	21-13-25	21-13-60	21-13-100	21-13-150
21-40-XX	21-40-05	21-40-25	21-40-60	21-40-100	21-40-150
21-80-XX	21-80-05	21-80-25	21-80-60	21-80-100	21-80-150

** XX = Load size.

LOW POWER DUAL ISOLATORS

CP LP22-FF-PP

Comprod Isolators are some of the best in the industry for blocking the transfer of RF power flow in the opposite direction. Low-Medium Power, and Fiercely Reliable, are some of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from back power, and providing extra isolation are just a few of the applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 Watt combinations, and combined with 2nd Harmonic filters for Hybrid Combiners, HTC's.



- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band

Electrical Specifications	22-13-XX	22-40-XX	22-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	100	100	100
Connectors	N-Female	N-Female	N-Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	50	50	50
Typical Insertion Loss, dB	0.9	0.7	0.5
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Dimensions, inches	3.94H x 6.25W x 1.78D	4.19H x 8.75W x 1.78D	5.63H x 6.13W x 1.84D
Weight, lbs	2.6	2.8	2.75
Mounting	*** Cavity / Plate / Cabinet / Rack Mount Are All Available ***		

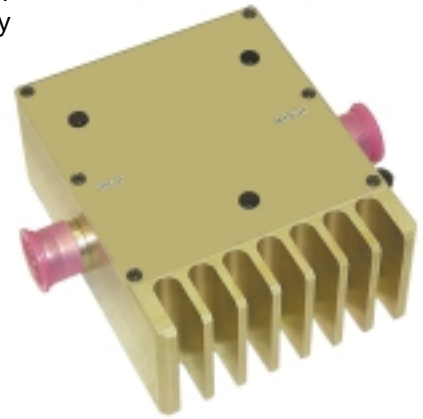
Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
22-13-XX	22-13-05	22-13-25	22-13-60	22-13-100	22-13-150
22-40-XX	22-40-05	22-40-25	22-40-60	22-40-100	22-40-150
22-80-XX	22-80-05	22-80-25	22-80-60	22-80-100	22-80-150

** XX = Load size.

MID POWER SINGLE ISOLATORS

CP MP31-FF-00

Comprod Isolators are some of the best in the industry for blocking the transfer of RF power flow in the opposite direction. Medium-High Power, and Fiercely Reliable, are some of the characteristics of these isolators. Used for inter-modulation panels, protecting your transmitters from back power, and providing extra isolation are just a few of the applications. These isolators have internal loads and can be combined with 2nd Harmonic filters for Hybrid Combiners, HTC's.



- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band
- **Integrated Load**
- **Sampler Port**

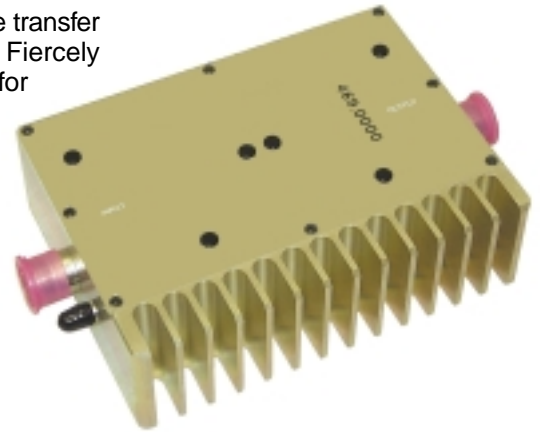
Electrical Specifications	31-13-00	31-40-00	31-80-00
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	150	150	100
Connectors	N-Female	N-Female	N-Female
Output Load Size	Internal-250W	Internal-250W	Internal-250W
Reverse Isolation, dB	30	30	30
Typical Insertion Loss, dB	0.3	0.3	0.3
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Dimensions, inches	1.7H x 4.5W x 4.33D	1.7H x 4.5W x 4.33D	1.7H x 4.5W x 4.33D
Weight, lbs	2.15	2.15	2.15
Mounting	**** Cavity / Plate / Cabinet / Rack Mount Are All Available ****		

** No external load, load is integrated into design.

MID POWER DUAL ISOLATORS

CP MP32-FF

Comprod Isolators are some of the best in the industry for blocking the transfer of RF power flow in the opposite direction. Medium Power, and Fiercely Reliable, are some of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from back power, and providing extra isolation are just a few of the applications. These isolators have internal loads and can be combined with 2nd Harmonic filters for Hybrid Combiners, HTC's.



- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band
- **Integrated Load**
- **Sampler Port**

Electrical Specifications	32-13-00	32-40-00	32-80-00
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	150	150	100
Connectors	N-Female	N-Female	N-Female
Output Load Size	Internal-250W	Internal-250W	Internal-250W
Reverse Isolation, dB	70	70	70
Typical Insertion Loss, dB	0.6	0.6	0.6
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications			
Dimensions, inches	1.7H x 6.93W x 4.33D	1.7H x 6.93W x 4.33D	1.7H x 6.93W x 4.33D
Weight, lbs	3.63	3.63	3.63
Mounting	**** Cavity / Plate / Cabinet / Rack Mount Are All Available ****		

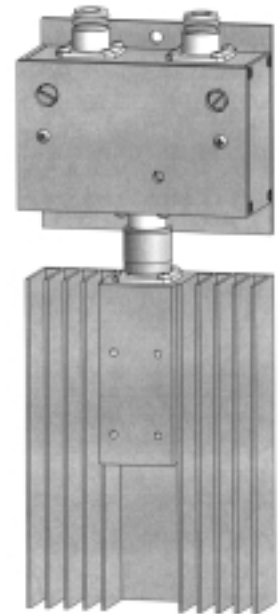
** No external load, load is integrated into design.

HIGH POWER DUAL ISOLATORS

CP HP41-FF-PP

Comprod Isolators are some of the best in the industry for blocking the transfer of RF power flow in the opposite direction. High Power, and Fiercely Reliable, are some of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from back power, and providing extra isolation are just a few of the applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 Watt combinations, and combined with 2nd Harmonic filters for Hybrid Combiners, HTC's.

- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band



Electrical Specifications	41-13-XX	41-40-XX	41-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	150	250	150
Connectors	N-Female	N-Female	N-Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	30	30	30
Typical Insertion Loss, dB	0.45	0.35	0.25
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications			
Dimensions, inches	3.94H x 3.75W x 1.78D	4.19H x 3.99W x 1.78D	5.63H x 3.15W x 1.84D
Weight, lbs	1.40	1.41	1.32
Mounting	**** Cavity / Plate / Cabinet / Rack Mount Are All Available ****		

Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
41-13-XX	41-13-05	41-13-25	41-13-60	41-13-100	41-13-150
41-40-XX	41-40-05	41-40-25	41-40-60	41-40-100	41-40-150
41-80-XX	41-80-05	41-80-25	41-80-60	41-80-100	41-80-150

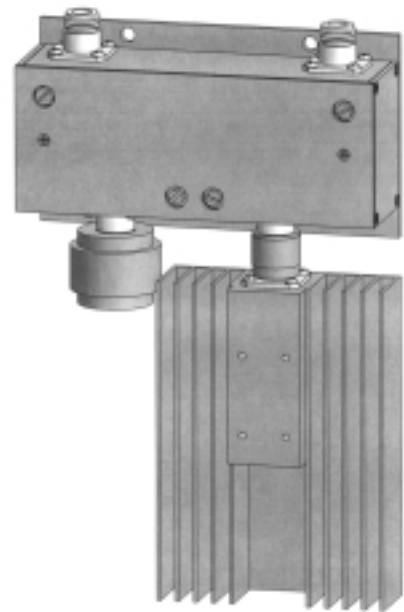
** XX = Load size.

HIGH POWER DUAL ISOLATORS

CP HP42-FF-PP

Comprod Isolators are some of the best in the industry for blocking the transfer of RF power flow in the opposite direction. High Power, and Fiercely Reliable, are some of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from back power, and providing extra isolation are just a few of the applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 Watt combinations, and combined with 2nd Harmonic filters for Hybrid Combiners, HTC's.

- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band



Electrical Specifications	42-13-XX	42-40-XX	42-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	150	250	150
Connectors	N-Female	N-Female	N-Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	50	50	50
Typical Insertion Loss, dB	0.9	0.7	0.5
VSWR	1.22:1	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications			
Dimensions, inches	3.94H x 6.25W x 1.78D	4.19H x 8.75W x 1.78D	5.63H x 6.13W x 1.84D
Weight, lbs	2.6	2.8	2.75
Mounting	**** Cavity / Plate / Cabinet / Rack Mount Are All Available ****		

Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
42-13-XX	42-13-05	42-13-25	42-13-60	42-13-100	42-13-150
42-40-XX	42-40-05	42-40-25	42-40-60	42-40-100	42-40-150
42-80-XX	42-80-05	42-80-25	42-80-60	42-80-100	42-80-150

** XX = Load size.

CP45-XX-03 Series

Comprod's continuous RF Loads have been specifically developed to provide our customers with a product that is truly install and forget. The RF Loads are specifically designed to absorb reflected power for 24/7 continuously. Our loads are traditionally larger than the industry average, a heavy duty version, providing constant protection to your transmitters with their oversized heat sinks.

- **Excellent Return Loss**
- **Continuous Power Duty**
 - 24/7 Operation
 - Install and Forget
- **Oversized Heat Sinks**



45-05-05



45-05-25A



45-05-25B



45-05-60



45-05-100



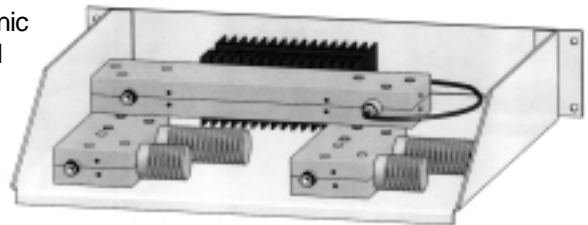
45-05-250

Electrical Specifications	45-05-05	45-05-25	45-05-60	45-05-100	45-05-250
Frequency Range, MHz	5 - 1000	5 - 1000	5 - 1000	5 - 1000	5 - 1000
Load Type	**** Dry****				
Cooling	**** Natural Air Convention ****				
Duty Cycle	**** Continuous ****				
Connectors	**** N - Male ****			N - Female	
Impedance, Ohms	**** 50 ****				
Maximum RF Input Power, Watts	5	25	60	100	250
Resistor Element Rating, Watts	60	60	250	250	250
Heatsink Area, inches (cm)	9.2 (59)	57 (368)	172.7 (1114)	334.7 (2159)	898.2 (5795)
Heatsink Power Density, Watts/inches	0.54	0.44	0.35	0.3	0.28
VSWR	**** 1.05:1 ****				
Temperature	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications					
Maximum length, inches	1.31 x 1.50	5.06 x 1.50	6.3 x 3.9 x 1.6	6.3 x 3.9 x 2.9	7.4 x 8.00 x 4.3
Weight, lbs	0.18	0.64	1.28	2.00	7.52

FILTERS

CP HTC-13-0X

Our Hybrid Transmit Combiners are designed for compact, close frequency installations. Our HTC's are perfect for very close spaced frequency transmitters. These devices are ideally used when our X-Pass technology does not provide enough performance and isolation for very close Tx-Tx. Hybrid Combiners are also great for inter-modulation panels, providing extra protection with their 2nd harmonic filters, or when physical space is a premium or is constrained, and providing extra isolation between two very close transmitters.



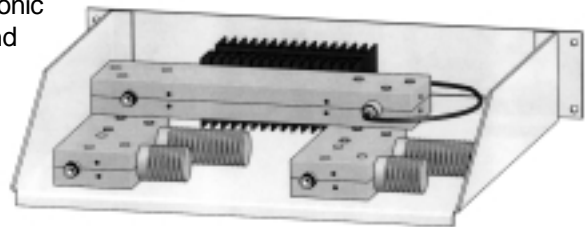
- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band

Electrical Specifications	HTC-13-04HS	HTC-13-04HD
Frequency Range, MHz	138-174	138-174
Frequency Split, MHz	30	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.
Channels	4	4
Continuous Power Input, Watts	100	100
Connectors	N-Female	N-Female
Isolator	Single	Dual
Isolation Tx/Tx, dB	65	100
Isolation Ant/Tx	35+	70+
Typical Insertion Loss, dB	6.8	7.0
VSWR - Input/Output	1.1:1 / 1.3:1	1.1:1 / 1.3:1
Temperature	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications		
Dimensions, inches	10.5H x 19W x 14.5D	10.5H x 19W x 14.5D
Weight, lbs	11.8	12.8
Mounting	19" Rack Mount	19" Rack Mount

* Dual versions are available.

CP HTC-40-0X

Our Hybrid Transmit Combiners are designed for compact, close frequency installations. Our HTC's are perfect for very close spaced frequency transmitters. These devices are ideally used when our X-Pass technology does not provide enough performance and isolation for very close Tx-Tx. Hybrid Combiners are also great for inter-modulation panels, providing extra protection with their 2nd harmonic filters, or when physical space is a premium or is constrained, and providing extra isolation between two very close transmitters.



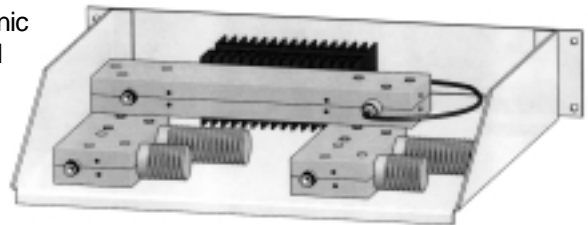
- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band

Electrical Specifications	HTC-40-04HS	HTC-40-04HD
Frequency Range, MHz	406-512	406-512
Frequency Split, MHz	30	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.
Channels	4	4
Continuous Power Input, Watts	100	100
Connectors	N-Female	N-Female
Isolator	Single	Dual
Isolation Tx/Tx, dB	65	100
Isolation Ant/Tx	35+	70+
Typical Insertion Loss, dB	6.8	7.0
VSWR - Input/Output	1.1:1 / 1.3:1	1.1:1 / 1.3:1
Temperature	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications		
Dimensions, inches	10.5H x 19W x 14.5D	10.5H x 19W x 14.5D
Weight, lbs	11.8	12.8
Mounting	19" RM	19" RM

* Dual versions are available.

CP HTC-80-0X

Our Hybrid Transmit Combiners are designed for compact, close frequency installations. Our HTC's are perfect for very close spaced frequency transmitters. These devices are ideally used when our X-Pass technology does not provide enough performance and isolation for very close Tx-Tx. Hybrid Combiners are also great for inter-modulation panels, providing extra protection with their 2nd harmonic filters, or when physical space is a premium or is constrained, and providing extra isolation between two very close transmitters.



- **High Isolation**
 - Minimizes Intermodulation Products
- **Low Loss**
 - Maximizes System Performance
- **Continuous Power**
 - Physical Size and Materials used maximizes performance across operating band

Electrical Specifications	HTC-80-04HS	HTC-80-04HD
Frequency Range, MHz	806-960	806-960
Frequency Split, MHz	30	24
BandWidth	2.5% Cent. Freq.	1% Cent. Freq.
Channels	4	4
Continuous Power Input, Watts	100	100
Connectors	N-Female	N-Female
Isolator	Single	Dual
Isolation Tx/Tx, dB	65	100
Isolation Ant/Tx	35+	70+
Typical Insertion Loss, dB	6.8	7.0
VSWR - Input/Output	1.1:1 / 1.3:1	1.1:1 / 1.3:1
Temperature	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications		
Dimensions, inches	10.5H x 19W x 14.5D	10.5H x 19W x 14.5D
Weight, lbs	11.8	12.8
Mounting	19" RM	19" RM

* Dual versions are available.

CP XBC-FF-PP Series

These Comprod Cross Band Couplers are designed for easy installations, reducing coaxial runs, and for in-building applications with side multi-band antennas. They are available in VHF, UHF, and 800/900 bands. They can be Tower Mounted (TM), Rack Mounted (RM), Tray Mounted (TRM) or stand alone.



Electrical Specifications		XBC-02-80	XBC-02-80R	XBC-38-80	XBC-38-80R	XBC-38-80RX
Frequency Range, MHz	1 st	25-175	25-175	380-512	380-512	380-512
	2 nd	380-960	380-960	806-960	806-960	806-960
Typical Loss, dB	1 st	0.35	0.35	0.20	0.350	0.30
	2 nd	0.50	0.50	0.20	0.50	0.50
Isolation, dB		40	40	40	40	40
Power Rating	1 st	250	Rx Only	250	Rx Only	250
	2 nd	250	Rx Only	250	Rx Only	Rx Only
Connectors		**** N-Female ****				
VSWR		**** 1.25:1 ****				
Temperature		-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C	-40°C to +60°C

Mechanical Specifications	
Dimensions	**** DEPENDS ON MOUNTING CONFIGURATION ****
Rack Mount	**** DEPENDS ON MOUNTING CONFIGURATION ****
Tower Mount	**** DEPENDS ON MOUNTING CONFIGURATION ****

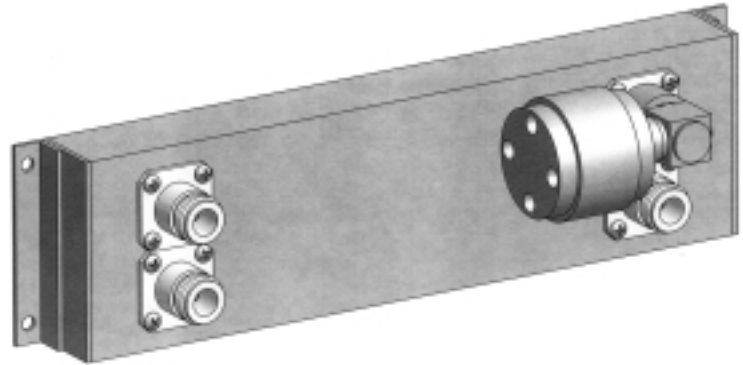
Order Information	19" Rack Mount	Tower Mount	Tray Mount	Without Bracket
XBC-02-80	XBC-02-80-RM	XBC-02-80-TM	XBC-02-80-TRM	XBC-02-80-WB
XBC-02-80R	XBC-02-80R-RM	XBC-02-80R-TM	XBC-02-80R-TRM	XBC-02-80R-WB
XBC-38-80	XBC-38-80-RM	XBC-38-80-TM	XBC-38-80-TRM	XBC-38-80-WB
XBC-38-80R	XBC-38-80R-RM	XBC-38-80R-TM	XBC-38-80R-TRM	XBC-38-80R-WB
XBC-38-80RX	XBC-38-80RX-RM	XBC-38-80RX-TM	XBC-38-80RX-TRM	XBC-38-80RX-WB

FILTERS

CP49-XX-7X Series

Comprod Power Dividers are designed for splitting power in two, three, or four directions. They are available in single, dual, triple or more units.

- **Low Insertion Loss**
- **High Isolation Between Output Ports**
- **Excellent VSWR**



Electrical Specifications	49-14-02	49-40-04	49-40-06	49-40-78	49-80-02	49-80-03
Frequency Range, MHz	144-174	132-174	400-520	400-520	800-1000	800-1000
Power Division	2-Way	4-Way	2-Way	4-Way	2-Way	3-Way
Bandwidth, MHz	30	42	120	120	200	200
Insertion Loss, Max dB	3.2	6.4	3.2	6.4	3.2	5.1
Return Loss	n/a	n/a	n/a	n/a	≤ -20dB	≤ -18dB
Input Power Rating, Watts	800	1000	500	1000	500	1.0
Isolation	n/a	n/a	n/a	n/a	n/a	> 20 dB
Connector	N-Female	N-Female	N-Female	N-Female	N-Female	N Female
Mechanical Specifications						
Maximum Length, (HxLxD) inches	1.8 x 5.25 x 2.5	2.0 x 19 x 2.75	1.8 x 5.25 x 2.5	2.0 x 19 x 2.75	1.8 x 5.25 x 2.5	1.6 x 4.4 x 2.5

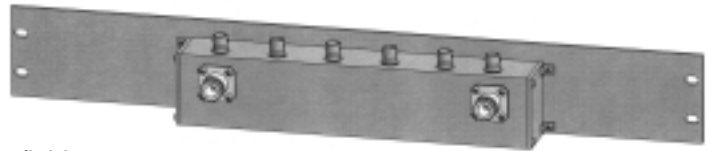
** Call for more versions.

Order Information	19" Rack Mount	Without Mount	Standard Mount
49-14-02	49-14-02RM	49-14-02WP	49-14-02
49-13-04	49-13-04RM	49-13-04WP	49-13-04
49-40-02	49-40-02RM	49-40-02WP	49-40-02
49-40-04	49-40-04RM	49-40-04WP	49-40-04
49-80-02	49-80-02RM	49-80-02WP	49-80-02
49-80-03	49-80-03RM	49-80-03WP	49-80-03

CP57-FF-XX Series

Comprod Comblines filters are designed using a compact construction. These high performance components are ideal for maximizing selectivity and transmitter band rejection. Low insertion losses and the excellent selectivity provide inherent performance properties that cannot be achieved using standard coaxial cavities.

- **High Performance**
- **Low Insertion Loss**
- **Excellent Selectivity**
 - Minimizes Decense and interference from adjacent systems
- **Compact Size**
 - Each cavity has a calibration index for easy field tuning



Electrical Specifications	57-13-01	57-40-02
Frequency Range, MHz	138-174	406-512
Frequency Spacing Min., MHz	1	2
Cavity Diameter, inches	6.625	6.625
Continuous Power Input	210W @ 1.0dB/Cav.	180W @ 1.0dB/Cav.
Connectors	N-Female	N-Female
Insertion Loss	3.4dB @ 1.0dB/Cav.	3.6dB @ 1.0dB/Cav.
Channel Isolation	70dB @ 1MHz	70dB @ 1MHz
VSWR	1.22:1	1.22:1
Temperature	-40°C to +60°C	-40°C to +60°C
Mechanical Specifications		
Maximum length, inches	34H x 19W x 16.5D	18.5H x 19W x 16.5D
Weight	n/a	n/a

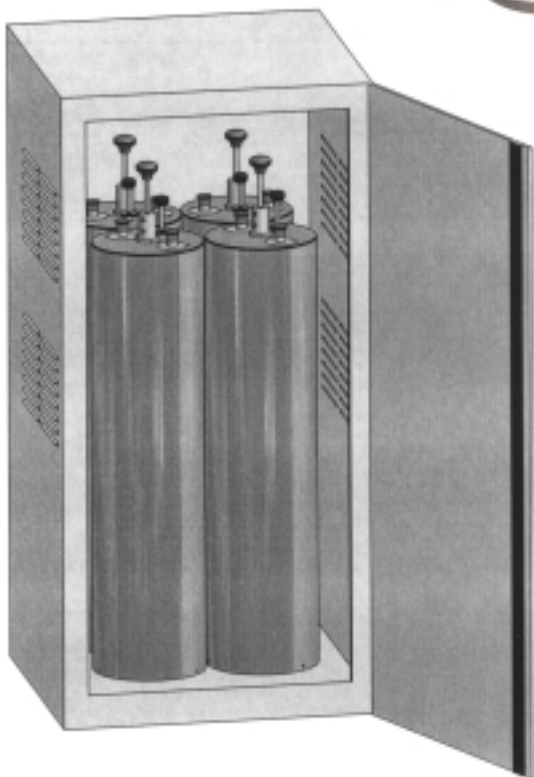
MOUNTING HARDWARE

Mounting Hardware

Comprod Communications has many types of mounting hardware:

- **Cabinet Mount** – (CM)
- **Wall Mount** – (WM)
- **Rack Mount** – (RM)
- **Tower Mount** – (TM)
- **Tray Mount** – (TRM)

We also offer custom Mounting Hardware specifically manufactured to your specifications. Our metal shop not only manufactures our own racks, cabinets, and mounting hardware, but has the capability to design, build, and manufacture any concepts that you may have.



FILTER RACKS

XTC – Xpandable Transmit Combiner Series

Comprod filters racks are designed for flexible, closely installed filter systems. Each rack has its own benefits, space constraints, ease of installation, and cost effectiveness.

We offer four types of racks:

19" Standard Rack

A standard 19" rack with mounting holes on either side of the rack for ease of installation. Available in different heights.

X-Rack

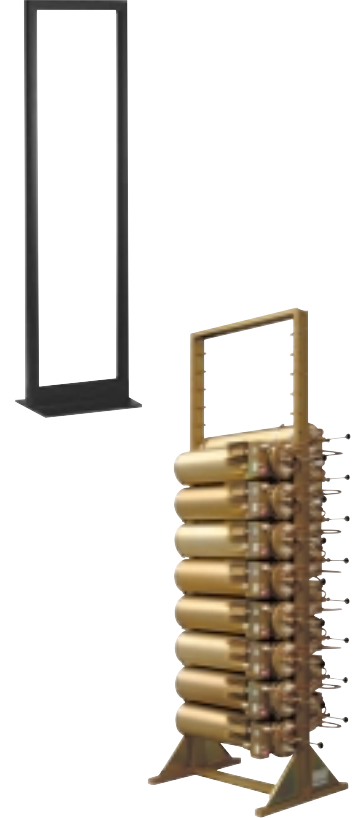
The X-Rack was specifically developed for our X-Series filtration. This racking system allows for maximum cavity installation, but minimizes the amount of physical space used. All cavities mount horizontally for easy installation and removal. Most systems will be supplied Turn-key in these forms, pre-assembled for quick installation. The capacity per rack is (21) cavities. Available in different heights.

Stak Rack

The Stak Rack is used when space is also a premium. It must be assembled at the site, two Stak Racks can hold (40) cavities. All cavities are mounted horizontally, (4) per row.

Wall-Mount & Cabinets

We have multiple versions of these cabinets and cavity mounts. Please call our offices for more information, please do not hesitate to ask for custom installations as well.



Rack Style	Model Number	Cavity Size	Cavity Length	# of Cav.	Height	Width	Depth
X Rack	19-10-26-13	10"	26"	13	79.5"	24"	28.69"
X Rack	19-07-13-15	6.625"	13"	15	65.25"	24"	15.81"
X Rack	19-07-11-15	6.625"	11.5"	15	65.25"	24"	14.19"
X Rack	19-07-11-20	6.625"	11.5"	21	86.5"	24"	14.19"
X Rack	19-07-26-20	6.625"	26"	21	86.5"	24"	28.69"
X Rack	19-07-26-15	6.625"	26"	15	65.25"	24"	28.69"
X Rack	19-07-13-20	6.625"	13"	21	86.5"	24"	15.81"
X Rack	19-10-26-19	10"	26"	19	108"	24"	28.69"
Stak Rack	HRV-85	6.625"	26"	20	42.62"	32.75"	30.25"
Stak Rack	HRU-85	6.625"	11.5"	20	42.62"	32.75"	18.25"
19" Standard Rack	**** Call for Available Dimensions ****						