

P4460E-3 Duplexer, bandpass, trunking, low-loss, 896-940 MHz

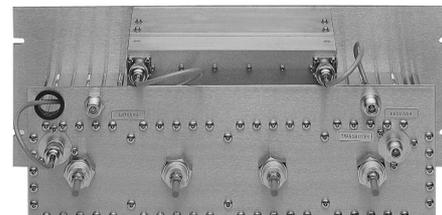
- Low loss aperture coupled Res-Lok™ 4 cavity filter on transmit
- 5 Section high selectivity combline filter on receive
- Ideal for trunking or cellular system previously using 2 or more antennas
- 400 Watt power handling capability.

The P4460E combines the low loss of a Res-Lok™ aperture-coupled filters on transmit side, with the high selectivity of a combline filter on receive, making it the ideal choice for single antenna operation of trunking base stations. The Res-Lok™ 4-cavity bandpass section has typically 1 dB insertion loss and provides 80 dB of noise suppression, which, when added to the typically 35-40 dB noise suppression provided by most cavity ferrite transmitter combiners, results in nearly 100+ dB noise suppression overall. The 5-pole combline filter on the receive side provides over 80 dB carrier suppression, a figure that is more than adequate for most system applications. In addition, both the transmit and receive bandpass windows are a full 5 MHz wide, a fact which allows sparing of this component on a multi-site basis without the need to have facilities for retuning.

Bandpass duplexers are more suitable for extremely congested areas to relieve intermodulation from high-level mixing in receiver front ends, and to reduce transmitter spurious and overall extraneous radiation.

These duplexers are easily field-tunable. Because of carefully designed temperature compensation, frequency drift over the operating temperature range is extremely small, typically 0.5 ppm/°C.

This duplexer is the ideal choice when it becomes necessary to duplex a trunking or cellular station previously using two or more antennas.



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Electrical Specifications

Frequency Range	MHz	896 to 940	
Tx Frequency Range	MHz	935 to 940	
Number of Cavities - Tx Side		4	
Number of Cavities - Rx Side		5	
Rx Frequency Range	MHz	896 to 901	
Input VSWR (max)		1.5:1	
Impedance	Ω	50	
Isolation - Tx noise suppression at Rx (min)	dB	80	
Isolation - Rx carrier suppression at Tx (min)	dB	80	
Average Power Input (max)	W	400	
Input Connectors		N-Female	
Output Connectors		N-Female	
Insertion loss (typ) Rx to Ant	dB	1.5	*1
Insertion loss (max) Rx to Ant	dB	1.8	
Insertion loss (typ) Tx to Ant	dB	1	*2
Insertion loss (max) Tx to Ant	dB	1.3	
Pass bandwidth	MHz	5	

Notes

*1 : 5 MHz BW
*2 : 5 MHz BW

Mechanical Specifications

Width	mm (in)	483 (19)
Depth	mm (in)	210 (8.25)
Length/ Height	mm (in)	178 (7)
Finish		chromate conversion
Weight	kg (lbs)	6.81 (15)
Actual shipping weight	kg (lbs)	9.08 (20)
Shipping dimensions	mm (in)	559x254x330 (22x10x13)
Mounting configurations		19 inch rack

Environmental Specifications

Temperature range	°C (°F)	-30 to +60 (-22 to +140)
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