

TWR8, TWR16, TWR24 SERIES

RECEIVER DISTRIBUTION PANELS



TWR8 SERIES



TWR16 SERIES

Telewave Receiver Distribution Panels are used to feed multiple receivers from a common antenna, reducing cost and tower loading, while providing consistent signal quality, output isolation, and higher output levels.

A typical receiver distribution panel includes a power supply, inline low noise preamplifier, and one or two 8-way splitters all on a single 19" panel. The preamplifier provides as much as +18 dB system gain to overcome splitting and cable losses.

Telewave receiver panels are fully shielded, and each panel has sufficient bandwidth to cover an entire commercial or Public Safety band. Standard panels have one input, 8 or 16 outputs, and a -20 dB sample port on a 7" x 19" panel. A 24 channel model is available for 700/800 MHz only. For sites with limited rack space, the Telewave 1R and 2R series of compact panels is also available with 8 or 16 channels in 1 rack unit (1.75" H), or up to 32 channels on a 3.5" panel.

Additional panels may be added at any time to increase the number of available outputs. New panels can be directly coupled to existing panels without additional parts or tuning. Successful multicoupling generally requires some type of filtering between the receiver panel and antenna. Telewave manufactures a wide range of high quality preselector systems for transmitters and receivers.

Telewave receiver panels provide 8 or 16 matched 50 ohm outputs from one input, with typical 25 dB isolation between ports. The antenna port is tuned with a matching network to insure a balanced input. A -20 dB sample port is also provided for connection of external signal analyzers.

Telewave can supply panels for operation on +12 to +24 VDC, and 120 or 220/240 VAC. Other voltage options are available on request. A battery backup on the DC input can provide uninterrupted operation during a site power failure (charging output not supplied). Tuning range

and bandwidth varies depending on frequency band and system components. Please contact Telewave to discuss your requirements with a sales engineer to ensure maximum system performance.

TWR8-, 16-, 24- SERIES

MODEL	FREQUENCY	PORTS	BANDWIDTH	GAIN
TWR8-030	30-88 MHz	8	58 MHz	0-18 dB
TWR8-050	50-512 MHz	8	400 MHz	0-18 dB
TWR8-150	132-174 MHz	8	42 MHz	0-18 dB
TWR8-250	216-250 MHz	8	34 MHz	0-18 dB
TWR8-350	300-400 MHz	8	40 MHz	0-18 dB
TWR8-450	400-512 MHz	8	40 MHz	0-18 dB
TWR8-760	763-824 MHz	8	40 MHz	0-12 dB
TWR8-860	806-960 MHz	8	40 MHz	0-12 dB
TWR16-030	30-88 MHz	16	58 MHz	0-15 dB
TWR16-050	50-512 MHz	16	400 MHz	0-15 dB
TWR16-150	132-174 MHz	16	42 MHz	0-15 dB
TWR16-250	216-250 MHz	16	34 MHz	0-15 dB
TWR16-350	300-400 MHz	16	40 MHz	0-15 dB
TWR16-450	400-512 MHz	16	40 MHz	0-15 dB
TWR16-760	763-824 MHz	16	40 MHz	0-8 dB
TWR16-860	806-960 MHz	16	40 MHz	0-8 dB
TWR24-760	763-824 MHz	24	40 MHz	0-6 dB
TWR24-860	806-960 MHz	24	40 MHz	0-6 dB

COMMON SPECIFICATIONS

Impedance / VSWR (typ)	50 ohms / 1.3:1	
Isolation RX-RX (min / typ.)	30-174 MHz: 20 dB / 25 dB 216-960 MHz: 25 dB / 30 dB	
Noise figure (typ)	2.5 dB	
Third order intercept	+36 dBm	
Intermodulation (typ)	-130 dB for -30 dBm input	
Sample port	-20 dB	
Temperature range	-40°C to +60°C	
Power requirements	AC	120 VAC (std.) 220/240 VAC (opt.)
	DC	+11.5 to +15 VDC (power reverting) +12 to +24 VDC (direct to preamp)
Connectors	Input - N Female Output - N or BNC Female (opt.)	
Dimensions (HWD) in. (cm)	7 x 19 x 3 (17.8 x 48.3 x 7.6)	
Weight lb. (kg) 8 / 16 / 24 ch	5.5 (2.5) / 6 (2.7) / 6.5 (2.9)	

NOTES

1. All unused ports must be terminated with 50 ohms. TWL-01 terminating resistor is available for this purpose.
2. Panel gain is measured from the input port to any output port. Gain is adjusted at the factory according to individual system requirements. Standard gain is 6 dB if not specified.
3. Tuning range and bandwidth vary depending on frequency band and system components.
4. Exact frequencies and system gain must be specified with order.