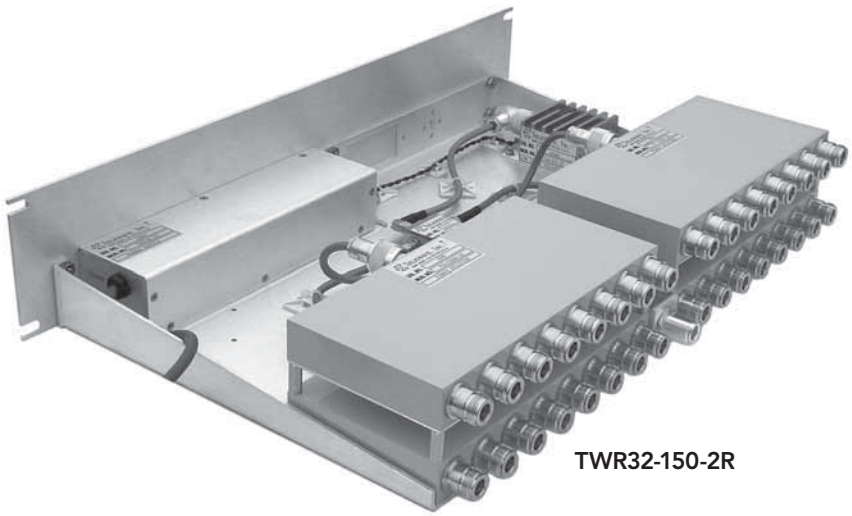
TELEWAVE, INC.

30 - 960 MHz

TWR24/32-2R SERIES
COMPACT RECEIVER PANELS

FEATURES

- 25 dB TYPICAL PORT TO PORT ISOLATION
- N OR BNC CONNECTORS
- 0.7 TO 2.5 dB TYPICAL NOISE FIGURE
- MODULAR DESIGN
- VHF-LOW/HIGH, UHF, 700/800/900 TRUNKING
- NO TUNING REQUIRED
- ONLY 2 RU (3.5" x 19")



TWR32-150-2R

Telewave 2R Compact Receiver Distribution Panels are used at medium to high density sites 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 three or four 8-way splitters all on a single 19" tray. The preamplifier provides as much as +12 dB system gain to overcome splitting and cable losses.

Telewave 2R panels provide full performance in only 2RU. All receiver panel components are fully shielded, and each panel has sufficient bandwidth to cover an entire commercial or Public Safety band.

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 2R Receiver Panels use high-quality splitters to provide 24 or 32 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.

These units, with their specially designed power supply, can be powered from an AC or DC source. The internal DC input circuitry will allow the external input DC voltage to vary between +11.5 VDC to +15 VDC, while keeping the DC output voltage constant. This feature allows the preamplifier to perform at its rated gain, 1 dB compression point, and 3rd order intercept point.

This design is especially suited for battery, solar panels, and thermal generator sources. An external DC-DC converter allows operation from DC inputs as low as +9.5 VDC.

The 2R series ships standard with an inline low noise bipolar preamplifier (except TT models). Optional items include PHEMT preamps for lower noise figure, high 3rd order intercept preamps for RF congested sites, redundant preamps for maximum reliability at remote sites, and broadband preamps for multi-band applications.

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TWR24/32-2R SERIES

MODEL	FREQUENCY	PORTS	BANDWIDTH	GAIN
TWR24-030-2R	30-88 MHz	24	58 MHz	0-12 dB
TWR24-050-2R	50-512 MHz	24	400 MHz	0-12 dB
TWR24-150-2R	132-174 MHz	24	42 MHz	0-12 dB
TWR24-250-2R	216-250 MHz	24	34 MHz	0-12 dB
TWR24-350-2R	300-400 MHz	24	40 MHz	0-12 dB
TWR24-450-2R	400-512 MHz	24	40 MHz	0-12 dB
TWR24-760-2R	763-824 MHz	24	40 MHz	0-5 dB
TWR24-860-2R	806-960 MHz	24	40 MHz	0-5 dB
TWR32-030-2R	30-88 MHz	32	58 MHz	0-12 dB
TWR32-050-2R	50-512 MHz	32	400 MHz	0-12 dB
TWR32-150-2R	132-174 MHz	32	42 MHz	0-12 dB
TWR32-250-2R	216-250 MHz	32	34 MHz	0-12 dB
TWR32-350-2R	300-400 MHz	32	40 MHz	0-12 dB
TWR32-450-2R	400-512 MHz	32	40 MHz	0-12 dB
TWR32-760-2R	763-824 MHz	32	40 MHz	0-5 dB
TWR32-860-2R	806-960 MHz	32	40 MHz	0-5 dB

COMMON SPECIFICATIONS		
Impedance / VSWR (typ.)		50 ohms / 1.3:1
Isolation port to port (min / typ.)		30-174 MHz: 20 dB / 25 dB
		216-960 MHz: 25 dB / 30 dB
Noise figure (typ)		2.5 dB
Intermodulation (typ)		-130 dB for -30 dBm input
Third order intercept		+36 dBm
Temperature range		-40°C to +60°C
Power requirements	AC	120 VAC (std.) 220/240 VAC (opt.)
	DC	+11.5 to +15 VDC (regulated output) +12 to +24 VDC (direct to preamp)
Connectors		Input - N Female Output - N or BNC Female (opt.)
Dimensions (HWD) in. (cm)		3.5 x 19 x 11 (8.9 x 48.3 x 27.9)
Weight lb. (kg) 24 / 32 ch.		11 (5.0) / 13 (5.9)

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.