

# TTPA-4544

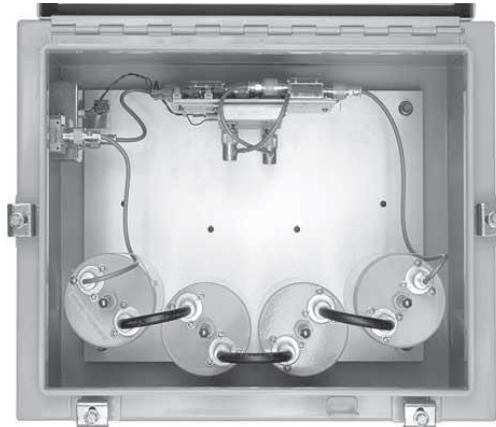
## TOWER TOP PREAMPLIFIER / PRESELECTOR

Telewave.io Integrated Tower Top Preamplifier systems recover low-level signals from long or high loss transmission lines and optimize system performance. The Telewave system enables single or multi-window operation in the 450-512 MHz receiver bands.

The RF preamplifier is designed with two PHEMT devices in a redundant hybrid configuration. A single device failure causes a 6 dB reduction in gain, but the amplifier continues to operate with stable impedance. This provides high operational reliability.

Very low loss input circuits provide the best possible noise figure. DC surge and reverse voltage protection is provided.

The preselector filter systems incorporate combine, cavity and multi-window technologies.



**TTPA-4544 Towertop Preamplifier**

Each filter is custom designed to operate in the most adverse RF environments.

The base power supply provides DC coupling and decoupling to the transmission line and connection to the receiver distribution system.

DC current levels are adjusted and monitored with a built-in metering panel.

The enclosure is fully weather-sealed, compliant with NEMA 4.

ELECTRICAL SPECIFICATIONS		
Frequency ranges (MHz)		455-460, 465-470, 470-512
System gain (single band)		17 dB (factory adjusted)
Noise figure (typ)		0.8 dB
3rd order intercept (typ)		+40 dB
Power requirements		+15 VDC / 280 mA (+12 VDC opt.)
VSWR		1.3:1
Lightning protection		Impulse supressor (Polyphaser)
Temperature range		-40°C to +70°C
MECHANICAL SPECIFICATIONS		
Dimensions	Tower box (HWD) in. (cm)	20 x 16 x 11.5 (50.8 x 40.6 x 29.2)
	Base supply	19 x 3.5 x 7.25 (48.3 x 8.9 x 18.4)
Weight	Tower box lb. (kg)	39 (17.7)
	Base supply	4.7 (2.1)
Finish	Tower box	NEMA 4 - Gray polyester powder coat
	Base supply	Grained aluminum
Connectors		N Female