

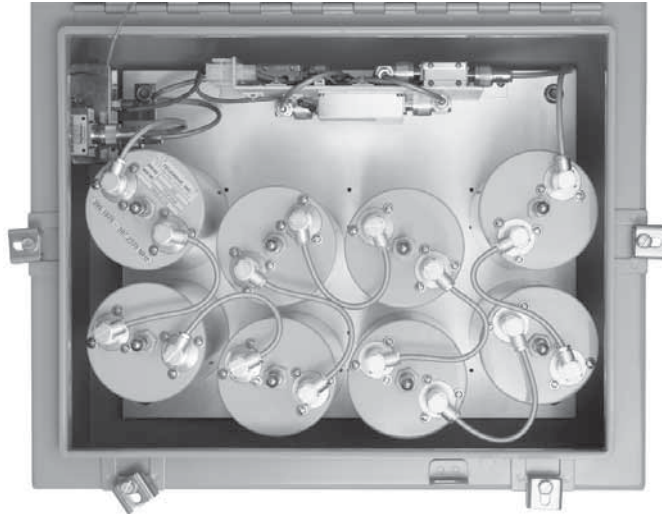
# TTPA-3548

## TOWER TOP PREAMPLIFIER / PRESELECTOR

Telewave 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 300-400 MHz receiver bands.

The high-level 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.



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)    |                          | 300-400 MHz                         |
| System gain (single band) |                          | 17 dB (factory adjusted)            |
| Noise figure (typ)        |                          | 0.8 dB                              |
| 3rd order intercept (typ) |                          | +40 dBm                             |
| 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                            |