



The Technical Materiel Corporation

RF Antenna Products

ANTENNA MUTICOUPLERS

■ FIXED OUTPUT

Four, eight, 16 or 32 RF outputs from one antenna, each with a nominal 2dB gain. Broadband input to eliminate tuning. RF filters suppress noise and unwanted signals. VLF, LF, MF, HF and VHF models.

■ MIXED OUTPUT

Allows a mix of LF, MF and HF in a single unit from one or more receiving antennas. Input filters suppress unwanted RF.

FEATURES

- Completely solidstate
- One or two RF inputs
- Broadband, no tuning
- 4, 8, 12, 16 or 32 outputs
- 10kHz-40MHz operation
- Wide, dynamic range
- Insertion gain of 2dB
- Multiple input filtering
- Fuse/overload protect
- MTBF min 20,000 hours
- Frontend surge protect
- Convection cooled
- Plug-in modules for expansion to 24 outputs



RECEIVE & TRANSMIT ANTENNAS

■ PASSIVE Series

Vertical antennas in the 15kHz to 30MHz frequency range. Fiberglass whips and telescoping steel or aluminum masts for fixed and mobile stations. Both transmit and receive units.

■ ACTIVE Series

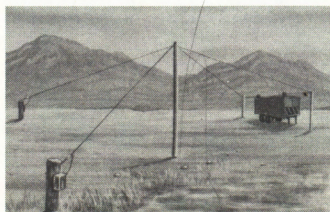
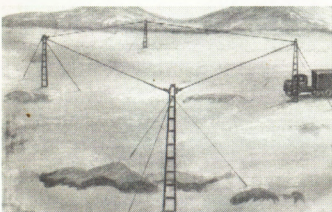
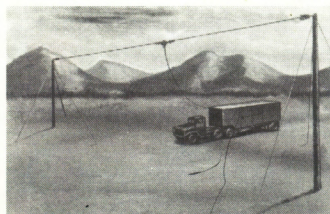
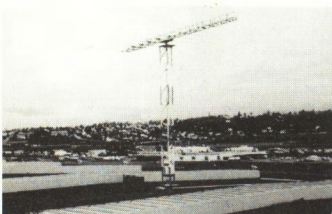
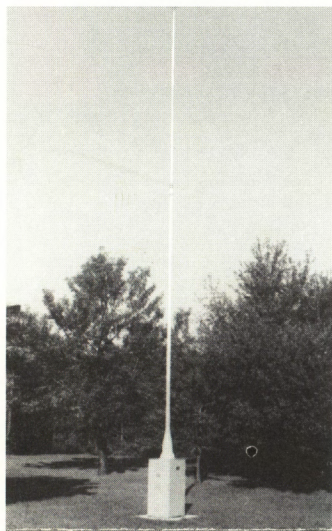
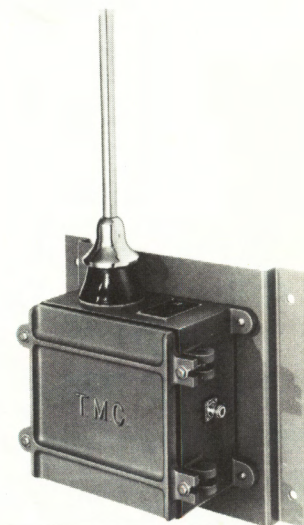
Passive design equipped with high-intercept amplifiers for a 20dB nominal gain. Bypass circuits detect high RF and protect input circuits. VLF, LF, MF, HF, VHF and UHF models.

FEATURES

- Broadband matching
- 15kHz to 30MHz ranges
- Free-standing verticals
- Telescope or sectional
- Single-unit construction
- Pole or wall mounting
- Multiple input styles

Added active features:

- 20dB gain across band
- Transmit bypass w/PTT
- High-RF input detection
- In-line coaxial supply
- Low-profile RF probe



ANTENNA SYSTEMS & ARRAYS

■ LOG-PERIODIC

Fixed/rotating log arrays in the HF spectrum, both transmit and receive.

■ DIPOLE/DOUBLET

Directional arrays in single and fan configurations.

■ RHOMBIC

Large, directional arrays for stations operating in more remote regions.

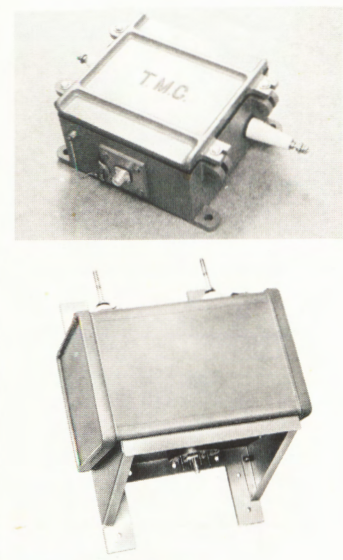
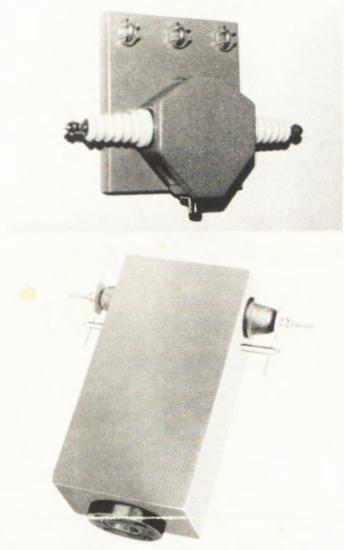
FEATURES

- Full HF spectrum
- Transmit and/or receive
- Up to 20kW rating
- Single/fan dipoles
- Optimized to range
- Copper-weld wire
- Heavy-duty insulators
- In service worldwide:

ANTARCTIC, GREENLAND
SAHARA DESERT

TELECOMMUNICATIONS ENGINEERING

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ANTENNA (BALUN) COUPLERS

TRANSMIT Series

Balanced-to-unbalanced impedance matching for RF antennas operating in the 2-30MHz range at power levels of 500 watts to 40kW PEP. All units can combine with L-C filter networks for precision matching.

RECEIVE Series

Broadbanded matching units with flat response curves for receive sites in the 90kHz-32MHz range.

FEATURES

- Broadband coverage
- Flat response curve
- Transmit rating to 40kW
- Matches 50 or 70 ohms to 150, 300, 600, others
- Optimized to band
- Rugged construction
- Weatherproofed
- 30-year service life
- Dipole, doublet and rhombic arrays
- Broad variety of coaxial line terminations
- Pole or wall mounting - universal brackets

DUMMY LOADS & TERMINATORS

TRANSMIT Series

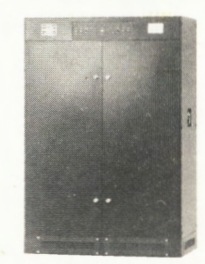
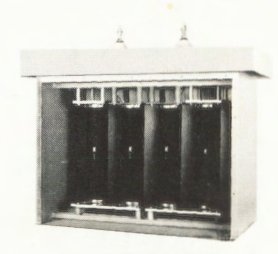
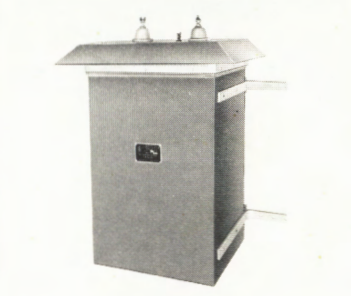
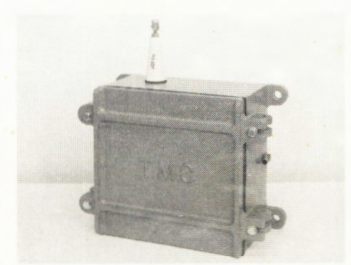
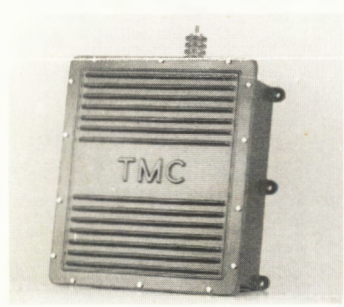
Useful in stations for off-line transmitter testing to verify performance or provide safe conditions for service. Also used to terminate large rhombic antenna arrays. Models range from 100 watts to 300kW with frequencies from DC to 30MHz.

RECEIVE Series

Terminating units for receiving arrays such as sloping-Vee and rhombic antennas. Features low power and high reliability.

FEATURES

- Off-line transmit testing
- 100W to 300kW Rating
- DC to 30MHz Range
- Low reactance curve
- Pole or wall mounting
- Cast aluminum or high-impact fiberglass case
- Convection-cooling
- 50, 150, 300, 600-ohm balanced-unbalanced
- 30-year service life
- Casters on indoor units
- Rugged construction with optional weather-proofing, protection
- Error-free installation
- Safety interlocking



TRANSMIT & RECEIVE ANTENNA TUNERS

FEATURES

Provides precision matching of RF transmitters to a variety of antennas in the 1.6 (marine) to 30MHz range. Both digital and analog tuners for fixed and full-range frequency coverage are available.

- Digital or analog tuning
- Channelized operation with all-channel option
- Weatherproofed for outdoor marine service
- Equipped with free-standing whip antenna

RF INPUT & OUTPUT FILTERS

FEATURES

Fixed low-pass and switched harmonic tuned filters for suppression of all unwanted RF in transmit or receive channels.

- Switched harmonic and fixed bandpass
- Broadcast stopband
- Up to 40kW PEP rating

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