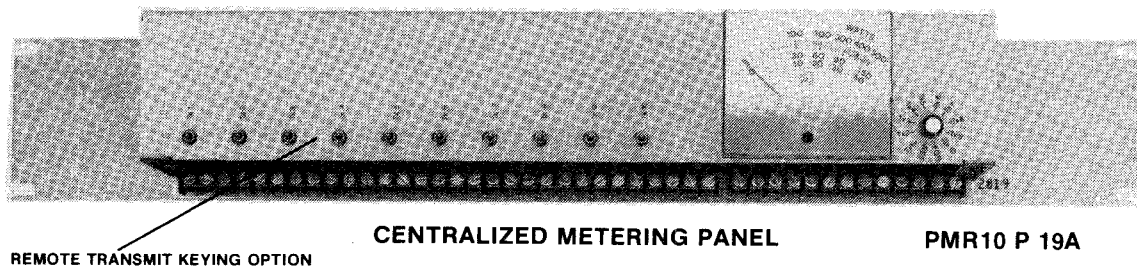
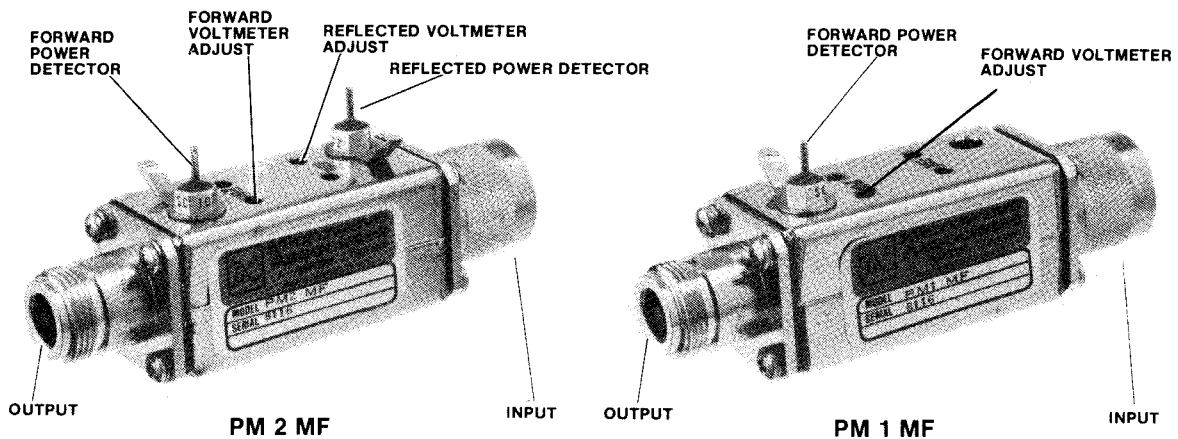




LAND MOBILE COMMUNICATIONS, INC.

CENTRALIZED RF POWER MONITORING



GENERAL INFORMATION:

The Microwave Associates Centralized RF Power Metering System is designed to accurately measure transmitter power to and from a combiner system. Ten transmitters, combiner forward power and reflected power can be read directly at the twist of a knob via permanently installed power monitors and a multiscaled meter. The power monitoring system is mounted on a 3.5-inch panel, for either 19 or 24-inch cabinets; however, the monitors are mounted at the appropriate input or output port of the combiner system. Calibration can be aided by use of optional switches, at the combiner, to remotely enable or disable transmitters. Combiner frequencies of 30 MHz to 960 MHz can be accommodated with equal ease.

OPERATIONAL:

The Centralized RF Power Metering System is extremely well suited for systems using transmitter combiners especially in the 406-512 MHz and the 806-890 MHz ranges because of the number of transmitters typically involved. In such a system, the Centralized Power Metering System will incorporate a power monitor in each transmitter input cable to the combiner for reading forward power into the combiner. The output of the combiner also contains a power monitor sampling both forward and reflected power to indicate not only the performance of the combiner but the remainder of the system as well (duplexers, cavities, transmission line, antenna, etc.) A 12 position rotary switch mounted on the metering panel enables the output of up to 10 transmitters to be read plus total forward and reflected power.



M/A-COM LAND MOBILE COMMUNICATIONS, INC.
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SYSTEM COMPONENTS:

SINGLE POWER DETECTOR

Model: PM 1 FM
Connectors: N Standard; Female In; Male Out [FM]
Others available, please specify
Female-Female [FF]
Male-Female [MF]

DUAL POWER DETECTOR

Model: PM 2 MF
Connectors: N Standard; Male In; Female Out [MF]
Others available, please specify
Female-Female [FF]
Female-Male [FM]

DETECTOR READOUT METER PANEL

Model: PMR10 P19 (19 Inch Panel)
PMR10 P24 (24 Inch Panel)

REMOTE TRANSMIT KEYING OPTION

Model: A
Add Suffix A to Readout Panel
Permits remote keying of transmitters
at the Readout Panel

FORWARD BRACKET OPTION

Model: B
Add Suffix B to Readout Panel
Allows front view meter reading

INTERCONNECTING HARNESS OPTION

Model: L 2835
Use with Microwave Associates
7Z344 combiners only
Model: L 2804
Use with Microwave Associates
TXC 800 Series combiners only

APPLICATION:

The Centralized Metering System whether used with transmitter combiners or not provides accurate and convenient power measurements of single and multiple transmitter installations without the need of external wattmeters. Inserting wattmeters in any transmission line may result in erroneous power readings due to the VSWR at the point to which the meter is connected. Centralized Metering System eliminates this potential problem by incorporating permanently installed power sensors in the transmission line of each transmitter rendering accurate repeatable readings. Furthermore, of equal importance is the elimination of connector failure due to broken or mis-aligned connector pins when inserting or removing wattmeters.

OPTIONS:

The metering panel of the Central Power Metering System may be ordered on a 19" or 24" panel. The standard mounting configuration of the centralized metering panel provides the meter face and all control switches to face the inside or back of the cabinet or rack to which it is mounted so that ease of tuning or adjustments to the equipment may be provided while observing the meter indication. An optional mounting configuration (option B) is available that re-orientates the meter face and switches to the front of the rack or cabinet if desired. When ordered with or to be used with either Microwave Associates transmitter combiner 7Z344 (406-512MHz) or TXC800 (800MHz frequencies), the Centralized Metering System may be supplied with the appropriate interconnecting harness (wiring between metering panel and sensors) by selecting the appropriate option number. Additionally, up to 10 toggle switches may be provided as an option (Option A) for remote keying of the transmitters at the centralized metering panel.