Power Monitoring Display

Product Description

This product provides a real-time display and simple user interface for RF power monitoring applications.

The module interfaces to one or two RFS High Dynamic Range RF Power Detectors via a Modbus/RS485 serial interface.

When equipped with one detector, the display can be used for either forward or reflected power monitoring.

Equipped with two detectors, the module can also display VSWR and return loss measurements. Note that the two detector configuration can also be used for monitoring forward or reflected power at two separate points.

Two VSWR alarm relay outputs are provided via a programmable logic controller (PLC). Two high/low power threshold alarms are also available. The PLC interfaces to the display module via an RS232 serial interface.

A second Modbus/RS485 serial port on the PLC can be used to interface the CMR to an existing Network Management System, so that measurements can be viewed at a remote locality such as a Network Operations Centre.

In addition to power monitoring screens, a set up screen is provided to allow users to select full-scale deflection (FSD) for bar-graph measurements. The user can also configure VSWR and high/low power threshold alarms at the set up screen.

Features
- Simple touch-screen interface
- 5.7-inch display (256 colour)
- Measurements displayed in numeric and bar-graph formats
- Configurable high/low power alarm thresholds
- Operates from 100 to 240 V AC supply
- Modbus/RS485 interface to RF detector modules

Specifications

Model	CMR
Application	Power monitoring
Display format	Numeric + bar graph
Frequency Range*	30 to 1000 MHz
RF Input Dynamic Range**	>60 dB
RF Connector Type**	N (M)
Certifications***	CE, UL
Power Supply	100 to 240 VAC, 50 to 60 Hz
Operating temperature	0 to +50 °C
Storage temperature	-20 to +60 °C

Notes:

*Standard model covers the FM, VHF and UHF frequency bands. Optional frequency variants (100 kHz to 2.7 GHz) are available to order.

**Using RFS High Dynamic Range RF Power Detectors.

***The certifications apply to the human machine interface (HMI) display module, PLC and power supply in the Digital Power Monitoring Display system.