Antenna System Monitor

132-174MHz / 380-520MHz / 746-870MHz / 870-960MHz Performance Monitoring of FWD and RFL Tx Power, Receive RSSI and System Isolation measurements ASM1317 / ASM3852 / ASM7487 / ASM8796



The Antenna System Monitor (ASM) provides channel specific forward and reflected transmitted power monitoring, Rx RSSI levels for up to 80 channels, and system isolation measurements. Four paired sets of forward and reflected Tx power measurement inputs facilitate monitoring via high power in-line couplers. The low loss Antenna Line Coupler is inserted after the Tx combiner on the antenna feeder cable. All frequencies, channel bandwidths and alarm level thresholds are software definable on a per-channel basis. A DB15 rear mounted connector provides alarm reporting outputs that can be hardwired into most alarm reporting facilities. The LED's on the front panel of the ASM allow visual confirmation of the ASM's operating and alarm status. Configuration, diagnostics and communication management is facilitated through the use of an on-board webserver GUI. Optional Site Alarm Modules (SAMs) and a Receive Systems Module (RSM) may be added to enhance measurement and alarm output capabilities.

Features:

- Individual channel monitoring of Tx forward and reflected power and Rx levels in multi-channel, multi-carrier systems.
- Non-intrusive 24x7 measurement, monitoring and alarm reporting of a system's RF performance parameters.
- Capable of monitoring up to 80 channels across multiple combiner systems
- Analogue, Digital, FDMA and TDMA compatible
- Local or Remote configuration and firmware updating via RJ45 Ethernet port and integral webserver.
- ASM supplied with one Antenna Line Coupler, additional couplers may be ordered separately if required.

FRONT VIEW







Specifications

| Antenna System Monitor | ASM |
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| Frequency Range (4 separate frequency models) | 132-174MHz, 380-520MHz, 746-870MHz or 870-960MHz |
| Maximum number of monitored channels | 80 |
| Available Tx forward power / VSWR monitoring port inputs | 4 pairs |
| Available Rx RSSI level monitoring ports | 1 (up to 3 if RSM fitted) |
| Rx monitoring port input range | -110dBm to -50dBm (up to -125dBm if RSM fitted) |
| Frequency channel step size (Tx & Rx) | 1.25kHz |
| Channel measurement bandwidths | 12.5kHz and 25kHz |
| Max spurious or IM products | -30dBm |
| Conducted emissions | Complies with CISPR22 Part B, FCC Part 15 (15.207) |
| Radiated emissions | Complies with CISPR22 Part B, FCC Part 15 (15.209) |
| RF Termination connectors | N (F) |
| Communication interface ports | 2 x rear mounted TCP/IP Ethernet ports (RJ45) |
| Internal alarm relay contacts output connector | Rear mounted DB15 (M) |
| Visual alarm notification | Front panel mounted LED's |
| Configurable alarms | Summary Fault / Tx FWD power / VSWR / RSSI & System Isolation |
| Alarm support | GUI / Relay Output / SNMP V2c Traps / SMTP Email / UDP Packets |
| Power supply options | 11-36VDC, 36-60VDC or 100-240VAC |
| DC power connector | Polarised 2-pin Phoenix connector |
| Mounting | 2RU 19" rack mounting |
| Dimensions | 19x2x3.5" / 483x50x89mm (incl connectors) |
| Weight | < 4.4lbs / 2kgs |
| Operational temperature range | 14° F to 140° F / -10° C to +60° C |

For more detailed information on the ASM, SAM and RSM products please refer to the User Manuals, Product Briefs, Service Bulletins, Application Notes, Firmware Updates, SNMP MIB files and other support information located at www.rfi-motorola.com.