

# M.I.L. PAC 385

## RELOCATABLE MICROWAVE TRANSCEIVER



## RELOCATABLE OUTDOOR VOLUMETRIC TRANSCEIVER FOR RAPID DEPLOYMENT, TEMPORARY OR MOBILE SITE PROTECTION

M.I.L. PAC 385 is a fully portable microwave transceiver which provides high probability of detection and low false alarm rate in the outdoor environment. State-of-the-art circuitry, a precise detection pattern, extended battery life and unmatched ease of setup with tampered external controls make M.I.L. PAC 385 ideal for protection of VIP's, critical mobile assets such as trucks or aircraft, and other temporary high security requirements. M.I.L. PAC 385 can be used at gates, portals or roadway crossings or to establish a full perimeter of volumetric detection.

A patented Range Cut-Off (RCO) Circuit positively rejects all microwave targets beyond a preselected range. This unique capability makes M.I.L. PAC 385 immune to alarms from any object outside the RCO distance, even very large microwave targets such as semitrailers, trees, trains or overhead doors.

M.I.L. PAC 385 is also equipped with a patented Zero-Range Suppression (ZRS) Circuit which reduces the amplitude of any microwave target which is at very close range. This circuit dramatically reduces nuisance alarms from rain, vibration, birds and windblown objects. Neither the RCO nor the ZRS affects detection of human intruders within the detection pattern.

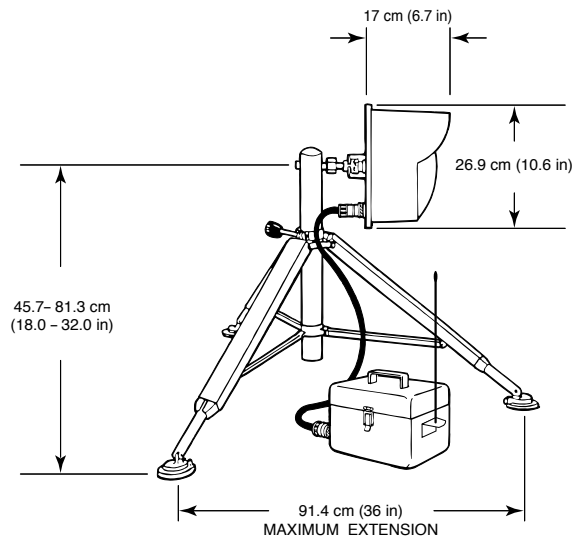
M.I.L. PAC 385 is mounted on a heavy duty tripod which can be secured with sandbags or waterbags or staked into the ground to withstand severe wind-loading. The transceiver is quickly adjusted with external controls. It is powered via a rear panel military style connector with the MPO2 Monitor Pac supplied with each transceiver. Alarm transmission and annunciation are accomplished through the use of a small wireless radio alarm transmitter and receiver at distances up to one mile.

### KEY FEATURES

- OUTDOOR VOLUMETRIC MICROWAVE DETECTION TO 122 M (400 FT)
- CONTINUOUSLY VARIABLE RANGE CUT-OFF (RCO) CIRCUIT PREVENTS ALARMS FROM MOVING OBJECTS BEYOND A PRESELECTED RANGE
- K-BAND MULTIPATH DETECTION FOR RESISTANCE TO AIRCRAFT/AIRPORT RADAR INTERFERENCE
- ZERO-RANGE SUPPRESSION (ZRS) CIRCUIT REDUCES EFFECTS OF RAIN, VIBRATION AND WIND
- EXTERNAL RCO AND SENSITIVITY CONTROLS
- 103 HOUR BATTERY LIFE
- OPTIONAL RM83 PERFORMANCE MONITOR FOR EASE OF ALIGNMENT AND TESTING

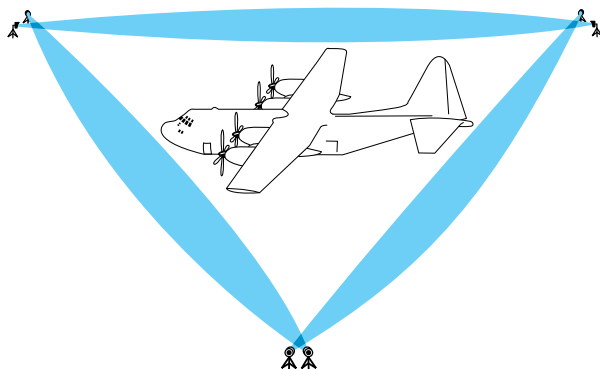
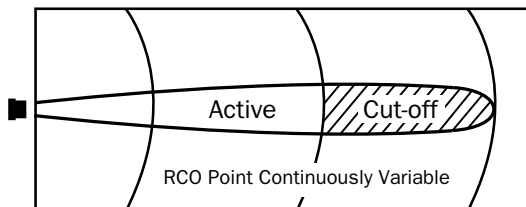
# M.I.L. PAC 385 SPECIFICATIONS

## DIMENSIONS



## PATTERN

M.I.L. PAC 385 provides a detection pattern with a maximum range of 122 m (400 ft) and a maximum width of 6.1 m (20 ft). Adjustment of the sensitivity control can reduce the pattern to approximately 30.5 m (100 ft) in length by 0.91 m (3 ft) in width. Horizontal and vertical antenna beamwidths are approximately 4 degrees. These distances are for a mounting height of 0.91-1.22 m (3-4 ft); other mounting heights will reduce the maximum range. Detection pattern and RCO distances are shown below.



Specifications subject to change without notice.

## SPECIFICATIONS

**Equipment Supplied:** Transceiver, MPO2 Monitor Pac with 12 VDC Rechargeable Battery, Radio Alarm Transmitter (27 MHz) and Antenna Assembly, Interconnecting Cable Assembly (6.1 m /20 ft), MT10 Tripod, and Fitted Carrying Case.

**Detection Range:** Variable from 30.5 m to 122 m (100 ft to 400 ft). Varies somewhat with site reflectivity.

**Detection Width:** Varies with range, 0.91 m to 6.1 m (3 ft to 20 ft). Varies somewhat with site reflectivity.

**Target Size:** 35 kg (77 lbs) human walking, running, hands and knees crawling or jumping. Prone crawling or rolling 35 kg (77 lbs) human or 30 cm metal sphere may be detected at shorter ranges with special site preparation.

**Target Velocity:** 0.06 m/sec to 8.0 m/sec (0.2 ft/sec to 26 ft/sec).

**Probability of Detection:** 0.99 minimum on 0.8 sq. meter target, based on equipment S/N ratio.

**Self Supervision:** Antenna blockage causes constant alarm.

**Range Cut-Off:** Targets will not be detected beyond a field-selected range 30.5 to 122 m (100 to 400 ft).

**Radiated Output:** 32 milliwatts peak at 24.125 GHz (USA).

**Spurious Emissions:** Conforms to F. C.C. Regulation Part 15 (USA). F.C.C. Identifier CA6385.

**DC input:** 11.0 to 14.5 VDC, 160 mA nominal multiplex disabled.

**Battery Life:** 103 hours operation to a discharge of 11 VDC at 0°C from single charge of 4 x 5.0 AH dry cell batteries.

**Mounting:** Locking ball swivel mount. 20° adjustment in any direction. Tripod center post rotates 360°.

**Performance Monitor:** External MS connector for connection to RM83 Performance Monitor.

**Temperature:** -35°C to +66°C (-30°F to + 150°F).

**Weight:** 26.8 kg (59 lbs) – Equipment only

**Shipping Weight:** 29 kg (64 lbs) – Equipment, case

### Accessories:

**RP01** Portable 16 Channel RF Alarm Receiver

**LN-XR1** Single Channel Radio Receiver

**LN-XR4** Four Channel Radio Receiver

**RM83** Performance Monitor

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