



# METROe RK

## The “Smart” GPS Amplifier System

### KEY FEATURES

- » Precise control over output signal level
- » Passes L1 (L1/L2 optional)
- » High Frequency Selectivity
- » Power Always ON or Power ON/OFF
- » Perfect for any GPS indoor application

### AVAILABLE OPTIONS

- » Power Supply AC & DC
- » Filter L1/L2

### INTRODUCTION

The only smart amplifier that complies with the essential requirements needed for CE and Notified Body approval. GPS Source’s METROe marks the integration of the latest GPS amplifier technology into a self-contained unit. The METROe RK is a complete GPS amplifier system that includes: METROe, active antenna, passive antenna, swivel mount, pole mount, surge suppressor and cabling. A smart amplifier system with a simple user interface, it is perfect for the commercial and public sector. Derived from high performance systems for military applications, the METROe smart amplifier device features L1 GPS Signals (optional L2 for approved applications) with signal lock set to -85dBm, and oscillation detection/mitigation.

### AUTOMATIC SIGNAL LEVEL CONTROL

The METROe smart amplifier system employs an automatic control to maintain the set output signal level. This is regardless of the uncertain loss or gain in the receive antenna cable network. It is smart enough to automatically condition the signal and prevent changes in performance. With this feature, the ERP stays locked at -85dBm.

### OSCILLATION DETECTION & AUTOMATIC MITIGATION

The METROe GPS smart amplifier system prevents system oscillation that can occur as a result of improper installation or operation. If the METROe detects oscillation, it will independently reduce the system gain. Even if the METROe is improperly installed or operated incorrectly, it will still prevent system oscillation.

### BUILT-IN TROUBLESHOOTING

The METROe will identify and isolate the following:

- Oscillation condition
  - High gain
  - Low gain
  - Short/Open circuit
  - Internal component failure
  - Less than four satellites
  - No satellites with adequate signal
- (call for complete list of conditions)*

### SYSTEM INCLUDES:

1. METROe
2. Passive Antenna
3. Active Antenna
4. Swivel Mount
5. Pole Mount
6. COPRO Surge Protector
7. 15 ft (4.6m) C240 coaxial cable
8. 100 ft (30.48m) C240 coaxial cable



# METROe RK Specifications

## OUTPUT PORTS

- » Number of ports 1

## ELECTRICAL SPECIFICATIONS

- » Input/Output impedance 50Ω
- » SWR all ports (typical)
  - Input: 2:1
  - Output: 2:1
- » Bandwidth
  - L1 1575.42±15 MHz
- » Gain (typical) 0-55dB
- » Gain flatness <3 dB
- » Noise figure <3 dB
- » AC input level
  - 230VAC UK
  - 230VAC European
- » DC input level 12 - 28 VDC
- » Active Antenna Output
  - Power Supply Output 6.8V

## PHYSICAL SPECIFICATIONS

- » RF connectors
  - N (m, f)
- » RS232 Serial Connector DB9(F) DCE
- » Weight 1.1 lbs (499 g)
- » Size: 5.87" x 3.15" x 1.9"
  - (149.1mm x 80mm x 48.3mm)
- » Operating temperature -40 to +85°C
- » Swivel Mount

