

# **METRO-G**

#### **KEY FEATURES**

- » Precise control over output signal level
- » High Frequency Selectivity -Passes GPS, GLONASS & GALILEO frequencies while rejecting other out-of-band signals.
- » Continuous Built-In-Testing (BIT)
- » Automatic Oscillation Detection
- » Perfect for aircraft hangars, manufacturing test cells, R&D facilities, any automated test environment or an anechoic chamber
- » Use for any GNSS retransmission application

## OPTIONS

» AC Power Only

- » L1 GNSS vs. L1/L2 GNSS Filtering
- » Multiple Connector Types
- » Power ON/OFF



### INTRODUCTION

The METRO-G is a GNSS smart amplifier, designed for commercial and public sectors. When used in conjunction with an active GPS/GLONASS receive antenna, it will pass GPS+GLONASS signals inside a building, hangar or any structure where signal is not accessible. It can be used in an automated test environment or in a shielded room that needs GNSS signal.

METRO-G has the unique benefit of allowing selection for the power control between signals. A user can easily decide which signal output the METRO-G will use to control signal power: GPS+GLONASS, GLONASS only or GPS only. This reduces the need for multiple antennas, receive devices and multiple antenna runs, while lowering maintenance and installation costs.

### AUTOMATIC SIGNAL LEVEL CONTROL

The METRO-G employs an automatic control to maintain the set output signal level, regardless of the uncertain loss or gain in the receive antenna cable network. Derived from high performance systems for military applications, this device allows precise determination over effective radiated power (ERP) levels, regardless of the uncertain loss or gain in the receive antenna cable network. It will automatically condition the signal and prevent changes in performance.

### **BUILT-IN TROUBLESHOOTING**

The METRO-G 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)



www.gpssource.com



# **METRO-G**

METRO-G 1X1

LED READOUT

USER INPUT PANEL

L1L2G

1400 1500 1600

FREQUENCY (MHz)

1400

1500

FREQUENCY (MHz)

1600

1700

1800

1900

0

Ð

2X 2.2 2X 2.0

2X 2.40

1700 1800 1900 2000

2X 5 4

ПΠ Ð

ПП

1000 1100 1200 1300

Í

Ð

GAIN 30 15. 0 -15 -30

> 9 8

7.

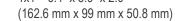
6 SWR 5 4 3. 2. 1-

0000000000

#### METRO-G OUTPUT PORTS » Number of ports 1

#### METRO-G ELECTRICAL SPECIFICATIONS

	LOI IOAHONO
» Input/Output impedance	50Ω
» SWR all ports (typical)	
Input:	2:1
Output:	2:1
» Bandwidth	
GPS & GLONASS L1	1560-1615 MHz
GPS & GLONASS L1/L2	
	+ 1560 - 1615 MHz
» Gain (nominal)	33 dB
» Gain Range	0-55dB
U U	
» Gain flatness	<3 dB
» Noise figure	<3 dB
» AC input level	110 VAC
	230VAC UK
	230VAC European
» DC input level	16 - 28 VDC
» Active Antenna Output	
Power Supply	Output 6.8V
METRO-G PHYSICAL SPEC	CIFICATIONS
» RF connectors	
N (m, f)	
SMA (m, f)	
TNC (m, f)	
» RS232 serial connector DI	B9(F) DCE
» Weight:	
1x1 1.2 lbs (544.3	a)
» Size:	0/
1x1 6.4" x 3.9" x 2.0	0"



» Operating temperature -40 to +85°C

CCR Reg	istered
CAGE:	1RTJ5
DUNS:	883995677
NAICS:	334220, 334290, 334511,
	541330, 541690

#### www.gpssource.com



2000

GPS Source, Inc. | GPSS-Sales@gd-ms.com | (866) 289-4777 toll free (in U.S.) | +1 (719) 421-7300

1000 1100

1200

1300

AS9100 and ISO 9001 Compliant