

# Portable Attenuation Measurement System Commercial (PAMS-C)

310-010042-003

- ▶ Measures Path Loss, Signal Strength Shielding Effectiveness
- ▶ 864-936 Mhz
- ▶ Path Loss Accuracy: +/- 1 dB Typ.
- ▶ Receiver Range: 0 To -120 dBm
- ▶ Transmitter Power: -30 To +30 dBm
- ▶ Synthesized: 1 MHz And 10 KHz Step Size
- ▶ AC Power Or Battery Operation

PAMS-C is a user-friendly, transmitter and receiver system that measures shielding effectiveness of RF shielded enclosures. Lightweight and compact, each unit measures approximately 12" x 5" x 5" and weighs 5.5 lbs., making PAMS-C ideally suited to field measurement tasks. Rugged construction ensures instrument survivability in a field test environment.

PAMS-C incorporates a self-calibrating architecture that provides for ease of use. It requires only minimal operator instruction for error-free operation. Its backlit LCD output displays shielding effectiveness, battery status, and other operating parameters.

PAMS-C allows the user to set a minimum shield level threshold. While sniffing around the enclosure, a tone will sound in the headphones should the shield level drop below the threshold. The pitch of the tone varies based on the measured shield level's distance from the set threshold value.

A USB interface is included on both the transmitter and receiver. This allows for serial control of selected functions and parameters. The PAMS-C receiver also includes a Spectrum Monitor mode, which displays ambient RF signals present within the test environment.

The PAMS-C receiver and transmitter are synthesized, with a minimum tuning step size of 100 kHz. Both units are battery



powered, and can be operated in an AC mode when connected to the external battery charger. Normal battery operation time is 5 hours for the receiver, and 2 hours for the transmitter. A complete charge cycle is completed in approximately 2 hours.

The receiver provides accurate level detection for signals in the range of -120 dBm to 0 dBm. Typical accuracy is +/-1.0 dB. An internal limiter provides protection to the receiver in the unlikely event that the receiver and transmitter are connected together. The receiver has a DC bias voltage on the connector, which may be used to power an external device such as a switch.

The transmitter provides a maximum output power of +30 dBm (1 watt). Output power can be adjusted in 1, 2, or 5 dB steps down to -30 dBm. Internal ALC circuitry maintains output level accuracy. The output of the transmitter is fully protected against damage.

The PAMS-C System includes transmitter, receiver, batteries, 2 portable antennas, chargers, manual and a rugged transit case.

The PAMS-C system is available on the GSA Schedule.

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## Complete System

Includes	PAMS-C Receiver PAMS-C Transmitter 15V 3.4A Desktop Power Supply (2 each) Antennas (2 each) 32 ohm headphones 2M USB cable 6 ft. coaxial cable USB Drivers Operator's Manual Airtight & Watertight Heavy Duty Transit Case
Weight	28 lbs. Nominal (all items installed in Transit Case)
Size	21.5" L x 14.6" H x 8.1" D (Transit Case)

## Specifications - PAMS-C Receiver

Frequency Band	864-936 MHz
Tuning Step Size	1 MHz and 100 kHz
Operating Modes	Signal Strength, Shield Level, Spectrum Monitor
IF Bandwidth	20 kHz nominal
1st IF	90 MHz
2nd IF	455 kHz
RF Input Connector	BNC female
RF Input Impedance	50 ohms nominal
Input Preselection	80 MHz 1 dB bandwidth
Signal Level Relative Accuracy	+/- 1.0 dB (-120 dBm to 0 dBm)
Absolute Level Accuracy	+/- 2.0 dB (-120 dBm to 0 dBm)
Maximum Safe Input Level	+30 dBm (1 watt) minimum
Battery Operation	5 hours minimum at full charge
Batteries	Nickel Cadmium
AC/Charger Operation	95-265VAC, 48-65 Hz
Charge Time	120 minutes typical
Controls	On/Off/Volume, Frequency Tune (frequency tune) F.DIGIT (adjusts step size), THOLD (sets threshold level for go/no-go testing), LIGHT (backlights LCD display), CAL (used to provide shielding reference level normalization), MODE (scrolls through the modes)
LED Indicators	Battery Overtemp, Battery Charge, Battery Fault
LCD Displayed Functions	Frequency, Battery Level, Mode (Signal Strength, Shield Level, Spectrum Monitor), Threshold Level Set, CAL Status, LOCK Status, Freq Adjust Status (1 MHz or 100 kHz)
Weight	5.5 lbs nominal
Case Size	11.7" H x 5.1" D x 4.9" W
Standard Accessories	32 ohm headphones, battery charger/power pack, manual, 1/4 wave on top of 1/2 wave vertical monopole antenna

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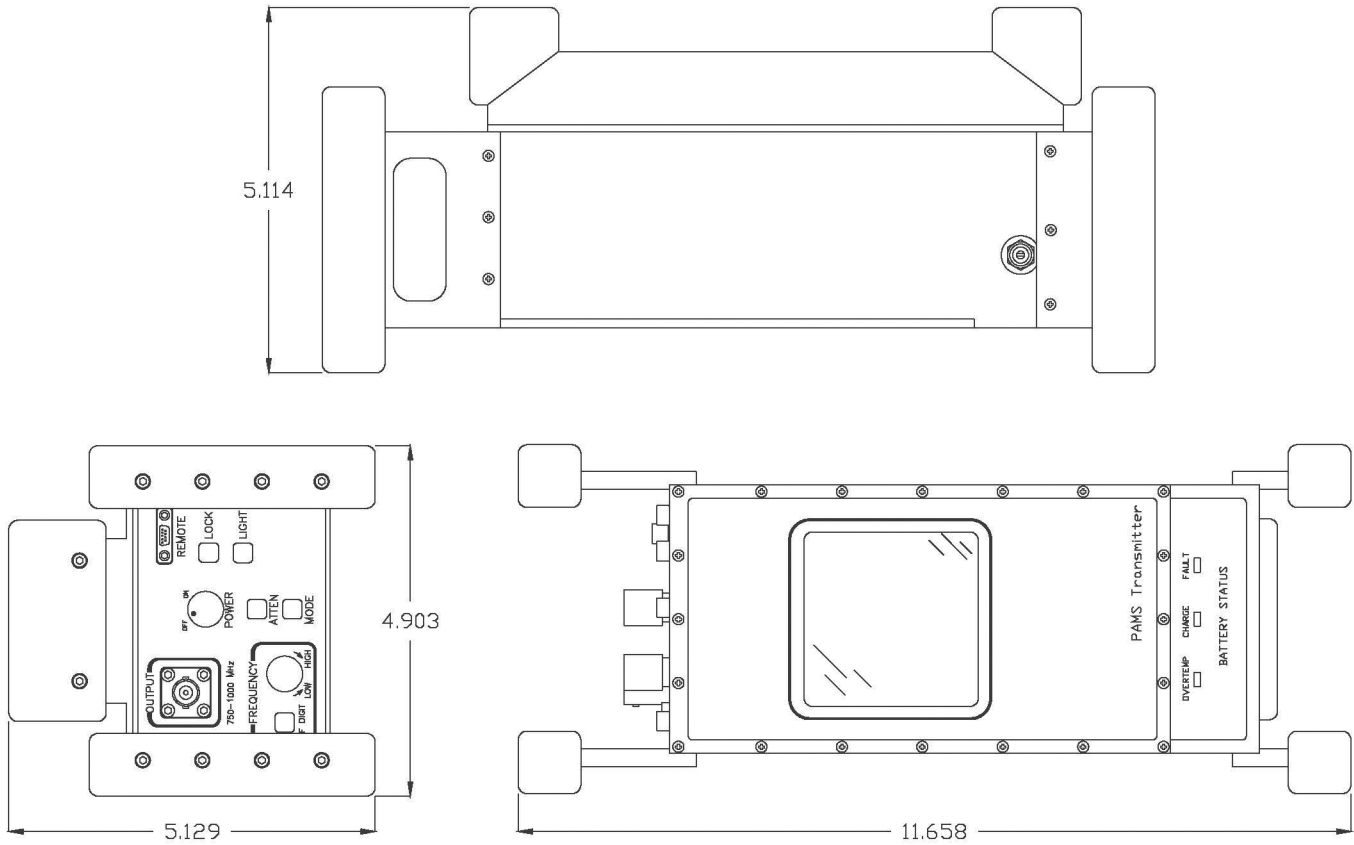
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## Specifications - PAMS-C Transmitter

Frequency Band	864-936 MHz
Tuning Step Size	1 MHz and 100 kHz
Maximum Output Power	+30 dBm minimum
Output Power Control	1, 2 or 5 dB steps from -30 to +30 dBm
Output Level Accuracy	+/-1.0 dB maximum
Harmonics	-60 dBc maximum
Output Impedance	50 ohms nominal
Load VSWR	Safe operation into infinite VSWR (isolator protected)
RF Output Connector	BNC female
Battery Operation	2 hours minimum at full charge
Batteries:	Nickel Cadmium
AC/Charger Operation	95-265VAC, 48-65 Hz
Charge Time	120 minutes typical
Controls	On/Off, Frequency (controls both frequency tuning and power output level), F.DIGIT (selects adjustment increment for both frequency tuning and output level), LIGHT (backlights LCD display), LOCK (locks out all controls), ATTEN (toggles between 0 and 60 dB)
LED Indicators	Battery Overtemp, Battery Charge, Battery Fault
LCD Displayed Functions	Frequency, Battery Level, Output Level, LOCK Status, Freq Adjust Status (1 MHz or 100 kHz), Power Adjust (1, 2 or 5 dB)
Weight	5.5 pounds nominal
Case Size	11.7" H x 5.1" D x 4.9" W
Standard Accessories	Battery charger/AC power pack, manual, 1/4 wave vertical antenna

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► PAMS-C Ordering Information

PAMS-C Complete System, part number	310-010042-003
PAMS-C Receiver Only, part number	310-010046-003
PAMS-C Transmitter Only, part number	310-010045-003