

Exhibit 3

Equipment Specification Sheets

A11XLV-L-F1-P110/5-NF

Technical Product Data

Features

- Features that Facilitate FCC Site Authorization for GPS Repeaters
- Calibrated & Controlled ERP Levels
- Filtered L1/L2
- Oscillation Detection & Prevention
- Antenna Monitor & Alarm Indication
- Wireless Remote Control via Bluetooth Option



Description

The A11XLV represents a significant advancement in GPS Repeater technology, including features that facilitate FCC site authorization. Featuring an integrated GPS receiver, the A11XLV provides a calibrated and controlled ERP at the user defined or FCC authorized level, regardless of the uncertain loss or gain in the receive antenna cable network. Additionally, the A11XLV provides a tracking indication when the device is tracking satellites and controlling the re-radiated signal levels, and enables the operator to observe the list of satellites that are being re-radiated. The product also includes optional features for oscillation detection and prevention, receive antenna monitoring, and filtering for the GPS L1 & L2 bands. The A11XLV features digital display with a user friendly menu enabling easy operation and configuration of the device. With an optional Bluetooth wireless interface also available, the A11XLV may be configured remotely when access to the system is not convenient.

The A11XLV is only available for certain eligible customers in the United States or for customers outside the United States. This is the product you need to facilitate FCC authorization of your site for GPS Repeaters. Call, email (sales@gpssource.com), or visit our website (www.gpssource.com) for further information on product options, specifications, or to receive an easy to use order sheet.

Repeater Amplifier:

Electrical Specifications, Operating Temperature -40 to 85°C

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range: 1575.4MHz 1227.6MHz	IN – OUT, IN/OUT-50Ω	1565 1217		1585 1237	MHz
Rejection: 1575MHz +/- 50MHz +/- 75MHz +/- 300MHz 1227MHz +/- 50MHz +/- 75MHz +/- 300MHz	IN – OUT, IN/OUT-50Ω;	5 12 33 5 12 33			dB
Gain -Min. Gain Setting -Max. Gain Setting	IN – OUT (Tx Ant.)	-21.8 37.2	-19 40	-16.2 42.8	dB
Controlled Sig. Lvl. ERP: -Min. RF Out ⁽¹⁾⁽²⁾ -Max. RF Out ⁽¹⁾⁽³⁾	IN – OUT (Tx Ant.)	-84.5 -63.5	-86 -65	-87.5 -66.5	dBm
Input/Output Imped.	IN, OUT Port		50		Ω
Input/Output SWR	Input, Output Port 50Ω			2.0:1	-
Noise Figure	IN Port – Tx Ant; Max. Signal Setting			2.5	dB
DC IN	DC Input from wall mount transformer, or quick disconnects Optional DC input on IN Port:	8 6	9	16 16	VDC VDC
Current	Amplifier Current Draw, DC Input			180	mA
Current (Iout)	Antenna Current Draw, DC output to Ant VDC In = 16V,			35	mA

Notes:

1. Min. and Max. calibrated/controlled GPS repeater output signal levels in ERP.
2. Equates to a range of approximately 30ft., assuming ERP signal level of -142.1dBm (EIRP of -140dBm) and typical value of -86dBm.
3. Equates to a range of approximately 350ft., assuming ERP signal level of -142.1dBm (EIRP of -140dBm) and typical value of -65dBm.

Electrical Specifications, Operating Temperature -40 to 85⁰C

Parameter	Conditions	Min	Typ	Max	Units
Freq. Range: 1575.4MHz 1227.6MHz	Ant – Output, Output = 50Ω	1565 1217		1585 1237	MHz
Imped.			50		Ω
Gain	Output =50Ω	2.5	3.0	3.5	dBi
Output SWR	Output = 50Ω			2.5:1	-
Polarization	Right Hand Circular				



Antenna GPS L1 & L1 /L2

PRODUCT DATA SHEET

Part Number: L12GP – Passive GPS L1 Antenna

Part Number: L1L22GP – Passive GPS L1/L2 Antenna

Performance Specifications

Frequency response covers GPS L1 & L2
+85°C

- 1575.42 +- 10MHz
- 1227.00 +- 10MHz
- VSWR < 1.5:1
- Antenna Gain: +3.5dBic
- DC Grounding: Yes (lightening protection)

Specifications

- Rejection: (2) 2-pole Filters for each band
- Polarization: Right Hand Circular
160D, DO-228
- Impedance: 50 Ohms

Environmental

- Temperature: -55°C to
- Altitude: 70,000ft
- Vibration: 10G's
- Leakage: Hermetically Sealed

Federal & Military

- FAA TSO C-144, DO-
- MIL-C-5541, MIL-E-5400
- MIL-I-45208A, MIL-STD-810

Mechanical Specifications

Dimensions

- Size: 2.6"D x 0.64"H
- Weight: 3.9oz



Connector
- SMA(f)