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GPSRKL1M Military Mobile L1 Repeater

Technical Product Data

Features

- **Military Style Connector**
- **Integrated Antenna**
- **Waterproof**
- **Mil Spec 1275B Power Supply**
- **Optional EMI Sealed**

Description

The GPSRKL1M is a GPS L1 repeater system designed specifically for rugged, mobile military environments. The product features a military style cannon plug connector for DC power, and comes with a waterproof enclosure with the option to EMI proof the enclosure as well. The GPSRKL1M also features custom gain options to ensure a radiated power level that covers only the required area.

The GPSRKL1M repeater comes with other various options to ensure the product meets your needs. 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.

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Repeater Amplifier:

Electrical Specifications, Operating Temperature -40 to 85°C

Parameter	Conditions	Min	Typ	Max	Units
Passband	IN Port – Tx Ant	1565	1575	1585	MHz
Input Imped.	IN Port		50		Ω
Gain -Standard -Custom	IN Port – Tx Ant	14 -0.5	15 TBD(1)	16 +0.5	dB
Input SWR	Input Port 50Ω			2.0:1	-
Noise Figure	IN Port – Tx Ant			1.8	dB
DC IN	DC Input on Military Connector: Optional DC input on In Port:	11.5 3		35(2) 16	VDC VDC
Current	Amplifier Current Draw, DC Input			14	mA
Current (Iout)	Antenna Current Draw, DC output to Ant(3) VDC In = 28V,			60	mA

Notes:

1. Gain may be specified by customer, 3 to 28dB.
2. Maximum DC IN is 35V when 1275B Powered option is included.
3. Maximum combined DC current draw out all ports of the device is a function of the DC input voltage and desired DC output voltage , according to the following:

$$Iout \leq 1.4 / (V_{DC\ IN} - V_{DC\ OUT}) - 0.016 \quad Amps$$

Repeater Antenna:

Electrical Specifications, Operating Temperature -40 to 85°C

Parameter	Conditions	Min	Typ	Max	Units
Frequency			1575		MHz
Bandwidth	Ant		20		MHz
Gain	Ant		3		dBiC
Polarization			RHCP		

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Available Options:

Power Supply Options:		
Source Voltage Options	**Voltage Input**	**Type**
	DC 11.5-35 VDC	Military Style Connector
	DC 3-16 VDC	DC Input on IN Port
Output Voltage Options	**DC Voltage Out**(1)	
	3.3 (DC IN min = 11.5V)	
	5 (DC IN min = 12.5V)	
	7.5 (DC IN min = 15V)	
	9 (DC IN min = 16.5V)	
	Custom	
RF Connector Options:		
IN Port Connector Options	**Connector Type**	**Limitations**
	N (Male & Female)	
	SMA (Male & Female)	
	TNC (Male & Female)	
	BNC (Male & Female)	Performance Not Guaranteed

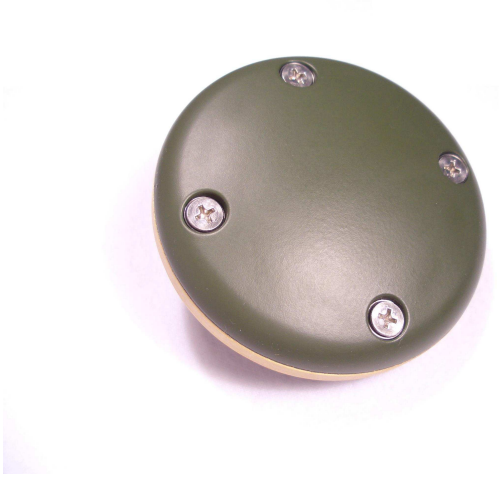
Notes:

1. Maximum DC current draw out input port of the device is a function of the DC input voltage and desired DC output voltage , according to the following:

$$Iout \leq 1.4 / (V_{DC\ IN} - V_{DC\ OUT}) - 0.016 \quad Amps\ (or\ 250mA\ max)$$

Recommended Receive Antenna

GPS Source recommends operation of the GPSRKL1M with the GPS Source PN *L13GA-XX* Active GPS antenna.



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Part Number:

GPSRKL1M – AXX – PM / 5 – SF

Product:
Mil. Spec. GPSPK
(Pass DC J1 for Ant.)

Gain Option:
AXX – Amplifier Gain Setting

Source Voltage:
PM – Military Connector (User supplies DC)

Output Voltage:
3.3, 5, 7.5, 9 – Denotes Voltage
(XX – custom output voltage, V – variable)

Connector Options:
NM – N, Male
NF – N, Female
SM – SMA, Male
SF – SMA, Female
TM – TNC, Male
TF – TNC, Female
BM – BNC, Male
BF – BNC, Female

For help in creating the part number to meet your exact needs, contact us at Sales@gpssource.com or visit our website at www.gpssource.com .

Mechanical:

Standard Housing: