

GPS Sounding System



GPS Radiosonde Sounding System RD-08, Full code correlating GPS radiosonde ground station ensures capturing reliable and accurate upper-air weather.

This lightweight and compact sounding system is intended for increased portability and conveniences in sounding. Your sounding experiences will be extended more than ever.

The corresponding GPS radiosonde, RS-11G carries a temperature sensor and humidity sensor. Pressure is calculated from the GPS altitude measured by single point positioning. Sounding duration lasts 180 minutes, allowing vast stretches of sounding possibilities. Abundant choices of interfaces expand the use of supplemental sensors.

GPS Receiver

RD-08AC

Excellent Design for WMO sounding purpose & Research Purposes

- Selected Design intended for sounding under CIMO guide, research purposes.

Sounding Anytime, Anywhere !

- A4 size receiver with 2 kg (4.4 lb) weight
- 110 to 240 VDC power supply for worldwide use
- Only 30-minute preparation time with antenna assembly included

Sounding Emergency Proof

- Safety function for sudden shut down of PC: audio data reproduction function enables data restoration

GPS Radiosonde

RS-11G

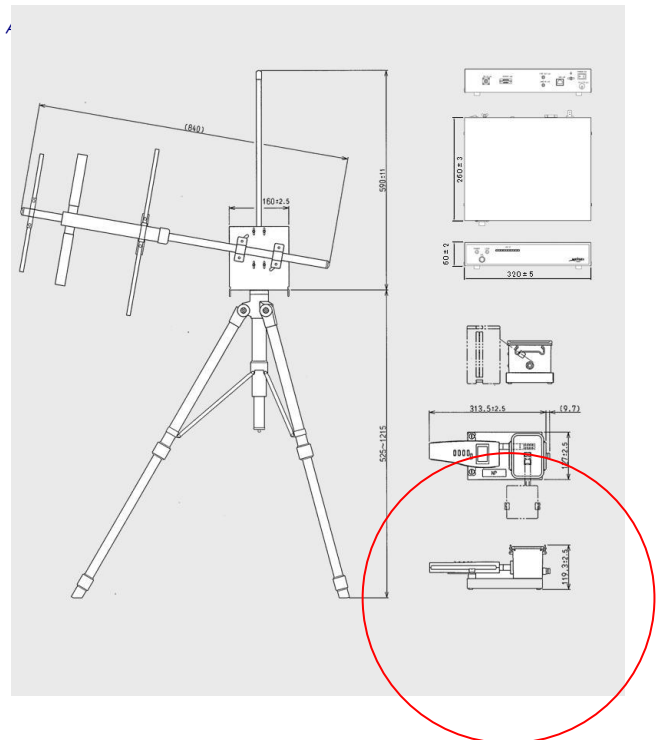
- Improved temperature and humidity sensor with highest accuracy for the upper-air soundings
- One lithium battery enabling 3 hour sounding approximately and easy operation
- GPM by SBAS method GPS positioning
- Precise time synchronization between temperature / humidity data and GPS data
- High stability of the ETSI certified transmitter (EN 302 054 V1.1.1)
- Compact and low-density design, total weight of 85g including batteries, reducing the shocks at the time of falling to the ground
- An input to a 16bit A/D 6ch and Serial input converter facilitating to connect special sensors; for ECC, CO2, OPC, FLASH, Cloud particle, etc.

Receiver: RD-08

Receiver	Tuning Range	400.0 to 406.0 MHz	Data Processor (Optional)	OS	Windows
	Channel	Every 100 kHz (60ch)		CPU	> 1 GHz
	Resolution	> -107 [dBm]		Memory	> 512 MB
	Indicator	Reception level, indicator lamp (LOCK)		Communication	> LAN X 1
	Functions	AFC, Limiter AMP, ATT		Language	English only
Demodulator	Type	PCM-FM、Biφ	Antenna	Absolute Gain	> 2.15 [dBi]
	Communication Rate	1,200 bps		Direction	N/A
	Error Correcting	BCH, 1 bit error correction		Center Frequency	403 MHz
Communications	Data Processor Port	LAN (10/100 BASE-T)	Yagi Antenna for long distance (Optional)	Input Impedance	50 Ω
	GPS Station Port	N/A		Transmission Distance	> 100 km horizontal
	Radiosonde Transmission Port	TTL level, RS-232C		Absolute Gain	> 7.65 [dBi]
	Antenna Switch	N/A		Direction	E = +/-35 deg, H = +/-45 deg
	Audio Port	Output × 1, Input × 1		Center Frequency	403 MHz
Dimensions	Dimensions	320(W) X 60(H) X 260(D) mm	Preamplifier	Input Impedance	50 Ω
	Weight	2.0 kg		Transmission Distance	< 250 km, horizontal
Power Supply	Voltage	100 to 240 VAC (or 12 VDC)	Other	Preamp Gain	20 [dB]
	Consumption	10 W		Filter	Fc = 403 MHz
				Connectivity to Special Purpose Sensor	ECC, CO2, HYVIS, MTR, OPC, CFH

GPS Radiosonde: RS-11G

Humidity	Resolution	0.1 %RH
	Accuracy	+/- 7.0 %RH (2σ)
	Response Time	< 0.5 sec (1,000 hPa, 25°C)
GPM Altitude	Measurement Range	-200 m to 40,000 m
	Resolution	1 m
	Accuracy	+/- 15 m (rms)
Pressure	Measurement Range	1,050 hPa to 3 hPa
	Resolution	0.1 hPa
	Accuracy	land to 300 hPa: +/-2 hPa 300 hPa to 3 hPa: +/-1 hPa
Wind Direction	Measurement Range	0 deg to 360 deg
	Resolution	0.01 deg
Wind Speed	Measurement Range	0 m/s to 200 m/s
	Resolution	0.1 m/s
	Accuracy	+/- 0.2 m/s (rms)



Precautions

- Before using products in this catalog, please read the user manual/operating instructions carefully. Please follow the operating instructions and do not remodel products. This will avoid problems and accidents. Please note that problems or accidents arising from incorrect usage occur at your own risk.
- Specifications, standards and/or designs shown in this catalog are subject to change without prior notice for improvement.
- For products which fall under the provisions of Foreign Exchange and Foreign Trade Control Law of Japan as strategic goods or services, permission must be obtained from Japanese Government before exporting them for Japan.
- We cannot accept responsibility for any direct or indirect financial damage or loss of profit that might occur when using the supplied software.
- Colors change to different colors when printing.

The specifications in this catalog are current as of September 2018

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