

WATERLOG®

YSI incorporated

MODEL H-5223

HDR GOES Transmitter with Integrated Data Logger

The WaterLog® Model H-5223 GOES Transmitter with Integrated Data Logger is a low cost Data Collection Platform designed for remote operations. This system allows any of the sensor readings to be transmitted over the GOES Radio system. It can transmit at 100, 300 or 1200 baud rates and has a built-in GPS receiver.

KEY FEATURES

- Menu driven user interface
- Self-timed and random GOES transmissions
- Configuration Query allows examination of set-up parameters
- Pseudo Binary or ASCII data format
- Selectable data order
- Ability to transmit different data than what is logged to the internal memory
- Configuration and Control implemented by external device via RS-232 interface
- User programmable data rates of 100BPS, 300BPS or 1200BPS
- GPS time management
- Four analog inputs
- SDI-12 Master mode
- Two digital I/O ports
- Data logging capability using nonvolatile internal storage, over 500,000 data values
- Operating temperature range of -40 degrees to 60 degrees
- Simple RS-232 connection for downloading data, and programming with a laptop and/or PDA unit with no special software required



DATA INPUT			
Performance	General Analog Input	Channels	4 (Single Ended)
		Resolution	24-Bit Resolution
		Accuracy	± 0.02%
		Input Ranges	0 to 5 Volts (All Channels)
		Excitation	5.0V switched, ratio metric with A/D, 10mA max load, ± 1.0 mV over load and temperature range
Counter Inputs	Type	Switch closure or voltage pulse, Internal 50k pull up resistor, falling edge triggered.	
	Input voltage	0-5 volts	
	Minimum Pulse Width	5 mS	
	Input Frequency	100Hz (max)	
DATA OUTPUT			
Interface	SDI-12	SDI-12 Master Mode	
		Protocol	SDI-12, 7-bit even parity, 1 stop bit
		Baud Rate	1200
	RS-232	1 RS-232 Communication Port	
		Protocol	RS-232, 8-bit, no parity, 1 stop bit
Baud Rate		Programmable	
GOES Transmitter	Type	100, 300, or 1200 BPS with built-in GPS receiver	
Frequency Coverage	100 and 300 BPS	GOES 1.5 kHz Channels (1-266)	
	1200 BPS	GOES 3.0 kHz Channels (1-133)	
Frequency Stability	Over Temperature	± 0.4 PPM	
	Long Term	± 1 PPM (including temperature)	
	Frequency Setting	To an accuracy of 1 Hz under software control	

MECHANICAL DATA			
Physical	Data Storage	Type	Non-Volatile FLASH
		Size	Able to store 500,000 data values
	Mounting	Hardware supplied for wall mounting	
	Accessories (Supplied)	9-pin RS-232 cable	
		9-pin D Male to Male Gender Changer	
		RS-232 Null Modem Adaptor	
		Sensor Terminal Block	
Power	Input Voltage (ASI only)	Minimum: 4 V DC	Maximum: 20 V DC
	Input Current	Sleep	< 7mA typical
		Active	18 mA average
		Transmit	< 3.0 A
	Output Power	100/300	7.1 Watts (nominal)Linear
		1200	11.2 Watts (nominal)Linear
		Output	50 Ohms, short and open circuit protected
ENVIRONMENT			
Temperature	Operating	-40° to +60° C	
	Storage	-40° to +80° C	
	Humidity	95% non-condensing	
MISCELLANEOUS			
Warranty	The WaterLog® H-5223 is warranted against defects in materials and workmanship for one year from date of shipment.		
Certification	NOAA/NESDIS certified for self-timed and random GOES transmissions		
Note	Specifications subject to change without prior notice due to on going commitment to product testing and improvement. LR January 15, 2011. D45 0311.		

