

WATER LOG[®]

YSI incorporated

MODEL H-2191 & H-2192

Voice and Data Modem

The WaterLOG[®] model H-2191 is a Line to Line Based Modem that provides both voice and data options.

The WaterLOG[®] model H-2192 is a GSM Cell Based Modem that provides voice, data and text (SMS) data options.

KEY FEATURES

- Sends measurement data in either voice or data mode
- Available with either telephone or GPRS modem
- Automatic voice call out from remote site on user defined alarm conditions
- Built in text-to-speech voice synthesizer
- Low power operation, with flexible power management for GPRS modem and radio
- Firmware upgrade via USB port
- Switch closure input for generating alarm call out voice messages

APPLICATIONS

- Works with the XL series of data loggers allowing any of the sensor readings to be transmitted.
- Can be added to existing sites
- Compatible with other data loggers for basic communications



GENERAL		
Telephone Option (H-2191 only)	Features	V.34 / 33.6Kbps + Voice
	Approval	FCC part 68
	Safety	UL 60950
GPRS Option (H-2192 only)	Type	GPRS, quad band, 14,400 bps
	Frequency	850/900/1800/1900 MHz
	Safety	UL 60950-1
	Network	PTCRB
Voice Synthesizer	Type	Text-to-speech, voice concatenation using human voice samples. Pitch, volume, tone, speed, expression, articulation, delay and format frequency are programmable. A user programmable dictionary allows the pronunciation of any character to be redefined.
Alarm Input Port	Type	Switch closure
	Voltage Input	0 to 3.3V, internal 47K-ohm pullup to 3.3V (5 Volt Tolerant)
	Connector	2-pin plug-in terminal
HF Radio Interface	Radio	DataRadio® DL-3400 (not supplied)
	Type	Analog, synthesized telemetry link
	Frequency	132-174 MHz VHF or 380-512 MHz UHF
	Power	5-watts at 13.3V
	Switched +12Vout	Internal 4.0A solid state circuit breaker powers external radio
RS-232 Port	Type	RS-232, DCE pinout
	Baud Rate	9600/8/N (programable)
	Connector	DB-9, female
USB Port	Type	Type-B, device, self powered
	Operation	Supports field firmware upgrade
Ethernet Port	Type	10/100 Base-T
	For Future Development	
LED Indicators	Modem Power	Green
	Radio Power	Green
	DSR	Green
	DCD	Green
	GPRS LINK	Green (H-2192 only)

Power	Input Voltage	9.0 to 16.0 Volts DC
	Current	900 uA (sleep, all sub systems off)
		900 uA typ (standby, telephone)
		25 mA typ (standby, GPRS active)
		120 mA max (transmitting, GPRS)
95 mA typ (standby, radio)		

MECHANICAL DATA

Physical	Enclosure	Aluminum, vinyl clad		
	Size	4.0" x 6.5" x 1.5"		
	Mounting	Mount bracket included		
	Connectors	RS-232	DB-9, female	
		Telephone	RJ-11 modular jack	
	Power	Phoenix Contact P/N 1757019		
	Alarm	Phoenix Contact P/N 1757019		
	Radio	2x5 box header for ribbon cable		
	Antenna (H-2192 only)	SMA, 50-ohm		
	USB	USB Type B (device)		
Ethernet	10/100 Base-T			

ENVIRONMENT

Temperature	Operating	-40° to +60° C (H-2191)
	Operating	-30° to 60° C (GPRS) (H-2192)
	Storage	-40° to +60° C
	Humidity	0 to 95% non-condensing

MISCELLANEOUS

Order Information	Telephone Modem	H-2191
	GPRS Modem	H-2192
Warranty	The WaterLOG® H-2191 & H-2192 are warranted against defects in materials and workmanship for one year from date of shipment.	
Note	Specifications subject to change without prior notice due to ongoing commitment to product testing and improvement. LR January 15, 2011. D41 0311.	

VOICE Mode:

The models H-2191 and H-2192 modems support Voice option for users to call into the station for current and historical data. The voice option also allows the modems to initiate call to designated numbers in the Alarm mode call out.

DATA Mode:

Both the H-2191 and H-2192 modems operate under a standard data modem setup. Users can access the station using a remote computer to retrieve data, change settings, program, etc...

TEXT (SMS) Mode:

Only the H-2192 GSM Cell modem supports a Text mode. Users can text in the station for current data values and receive warning texts when the programmed alarm conditions are exceeded.

