MODEL HD3011 TIDE GAUGE

Herrin Design's Model HD3011

Tide Gauge is an ocean tide monitoring system designed for use on dredges, ships, survey vessels or other environments where accurate tide data is required. The system has two components, a transmitter and a receiver, which communicate using a radio link. The transmitter uses a sensitive pressure transducer to measure precise changes in tide levels. The tide level is displayed at the transmitter panel and is also stored, along with the time and date, in transmitter memory. The information is simultaneously sent, by the radio link, to the remote receiver. The receiver displays the tide reading, makes a hard copy of the tide, time, date and the identification code of the transmitting unit. A port is available for sending the data to a PC or other peripheral device.

The HD3011 is compatible with the popular Hazen Model HTG5000 Tide Gauge. There are specific sections in the operating manual that deal with using the HD3011 transmitter with the HTG5000 receiver and for using the HD3011 receiver with the HTG5000 transmitter.

The HD3011 transmitter is a self-contained data logger. It is powered by a rechargeable lead-acid battery pack capable of up to 6 months operation between charges. The HD3011 transmitter measures tide changes using a precise pressure sensor, housed in a titanium/delrin case. This sensor can detect tide changes as small as +/-0.01 feet. This tide information is shown on a Liquid Crystal Display on the front panel of the HD3011 transmitter. The transmitter can also store up to 4600 records for direct downloading to a terminal or computer. Using a rugged synthesized radio link it can transmit real-time tide data to a receiver on a dredge, survey boat or other remote location several miles distant. The HD3011 transmitter is designed to withstand a harsh environment.

The HD3011 receiver receives and records data from the HD3011 transmitter. It displays tide data at the receiver terminal. The large, backlighted display is easy to read but unobtrusive in night time operations. The receiver provides a hard copy of the tide data including date, time, tide level and the identification code of the transmitter sending the data. It also monitors and will report a low battery condition at the transmitter. It can also send data to a terminal or computer using standard RS232C protocols.

Small size and versatile over or under mounting bracket simplifies receiver installation.

Herrin Design & Manufacturing Co.
Communications & Control Systems
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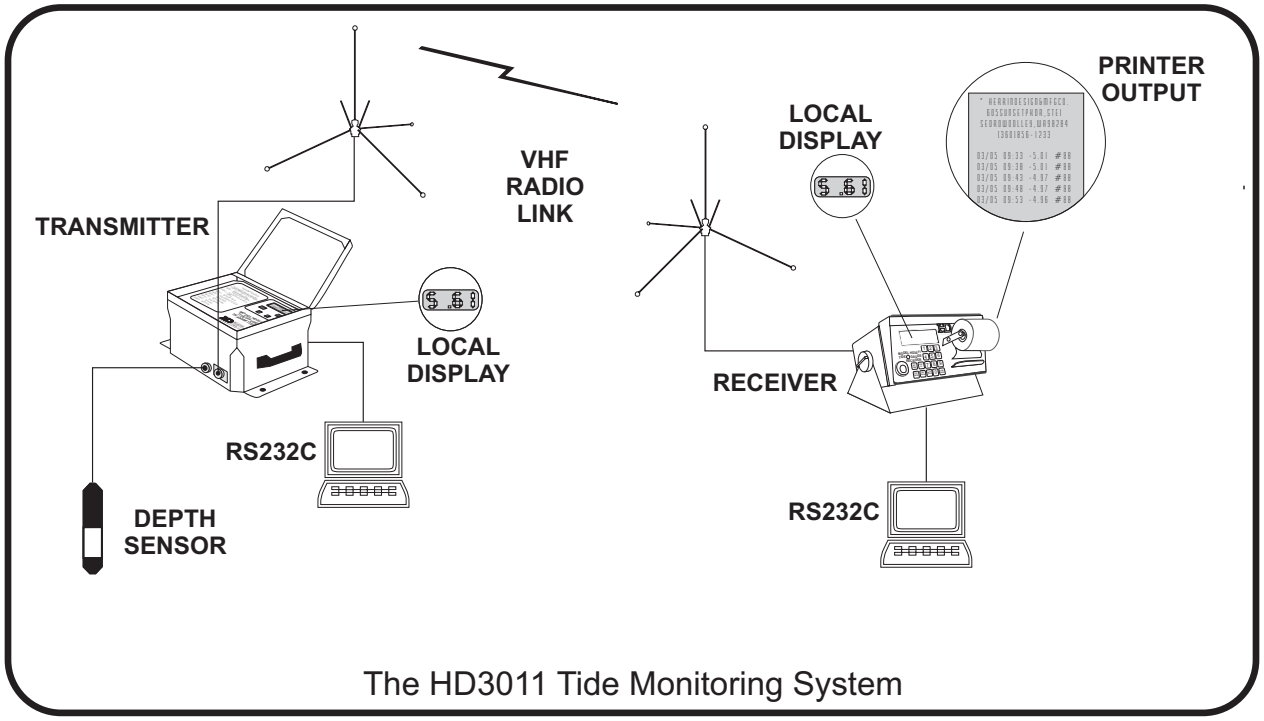

The HD3011 Tide Monitoring System

Transmitter Specifications

Output Power	2 to 5 Watts Output, VHF or UHF type accepted under FCC Parts 21, 81, 91, 93 and 95a.
Transmit Time	Approximately 2 Sec.
Transmit Intervals	1 to 99 Minutes
Power	12 volt, 12 Amp-hr, sealed lead Acid, rechargeable battery
Power Consumption	12V, 110uA Stdby. 400mA Op.
Battery Life	Up to 7 months/charge
Tide Resolution	+/- 0.01 Ft.
Tide Range	-5 to 30 feet or -1.52 to 9.14 meters
Data Storage	4600 events (RS232C)
Data Display	Back lighted, 2 line 16 Character LCD
Weight	24lbs
Dimensions	8.5w x 10.5l x 8.3h
Sensor	Quartz Strain Gauge Bridge, housed in Titanium Body with Polyurethane Sheathed Cable

Receiver Specifications

Operating Range	VHF
Freq. Stability	+/-0.001% (-30 to +60 Deg C)
Sensitivity	Less than 0.35 uV 12db SINAD Less than 0.50 uV 20db Quieting
Demodulator	Biquad Filter and PLL Decoder
Circuitry	8 bit Embedded Microprocessor
Units	Feet or Meters
Data Storage	34 Event Backup (non-volatile)
Data Display	Large, 4 Character, 0.7” LCD Backlight
Printer	24 Character/line Thermal
Weight	4 Lbs
Dimensions	7.5w x 3.5h x 5d
Mounting	Versatile over or under bracket
Power	117VAC, 60Hz Optional 12VDC, 0.5A

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