

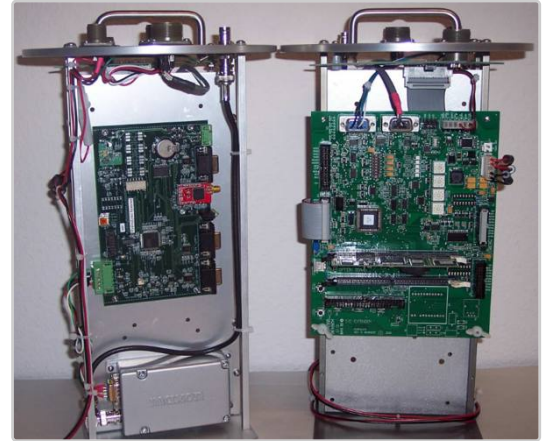


General Description

The HydroLynx Model 50386/A2 ALERT2 Data Transmitter uses the HydroLynx ALERT2 Encoder to transmit ALERT2 data reports, implementing the design goals of ALERT2: increased data throughput and flexibility while eliminating erroneous data reports. ALERT2 combines a high baud rate, state-of-the-art data encryption with Forward Error Correction (FEC), and Time Division Multiple Access (TDMA) communications.

High baud rate transmissions allow the ALERT2 data packet to include more information than standard ALERT. The data content is designed for format flexibility, and FEC ensures reliable RF transmission at high baud rates. TDMA eliminates the data report collisions inherent in standard ALERT, requiring a GPS antenna/receiver to keep the transmitter clock within its allocated TDMA time slot.

The 50386/A2 uses the same 50386SLB and 50386PCOS logic boards proven over more than 10 years of field service. It is programmable with the 50386 Toolbox software. With the ALERT2 data packet, sensor values can be calibrated and reported in engineering units across multiple formats — a major advance over the legacy ALERT integer range of 0–2,047.



Model 50386/A2 ALERT2 Data Transmitter

Specifications

ALERT2 Data Formats

16-bit Unsigned Integer	0 to 65,535
Signed Integer	-32,767 to 32,767
Single Precision Float	7 decimal digit IEEE
Double Precision Float	16 decimal digit IEEE
Station ID (SID) Range	1 to 65,534 (ALERT: 0–8,191)
Sensor Number (SN)	0 to 254 per station

Ordering Information

50386/A2-54	Transmitter in Round Canister, 1 Precipitation Input
50386/A2-88	Same as 50386/A2-54 with 2 Digital Inputs
50386/A2-90	Same as 50386/A2-54 with 2 Digital & 1 Analog Inputs
50386/A2-81	Same as 50386/A2-54 with 3 Digital & 7 Analog Inputs
50386/A2-N	Transmitter in NEMA 4X Enclosure
50386/A2-NZ	NEMA 4X Enclosure with two sets of terminal strips
50386/A2-UP	ALERT2 Upgrade to existing 50386 Data Transmitter
50386/A2-H	ALERT2 High Data Rate (HDR)
50386/A2-TU	Trade up from ALERT1 to ALERT2

Model 50386/A2-UP ALERT2 Upgrade

The Model 50386/A2-UP ALERT2 upgrade includes the HydroLynx ALERT2 Encoder, a GPS antenna/receiver with lightning arrester, and a lynx386.exe Version 2-XX-XX application program upgrade. The Encoder is installed between the 50386SLB PCB and the radio, providing an ALERT2 Protocol-compliant data packet. HydroLynx recommends a 5033-0.6B Solar Panel with an 18 amp/hr battery at all 50386/A2 sites. ALERT2 technology has been licensed from Blue Water Design LLC.

Radio Options

Default	Maxon 5W with Enclosure
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Supported

Ritron 5W without Enclosure; Ritron 30W with Enclosure