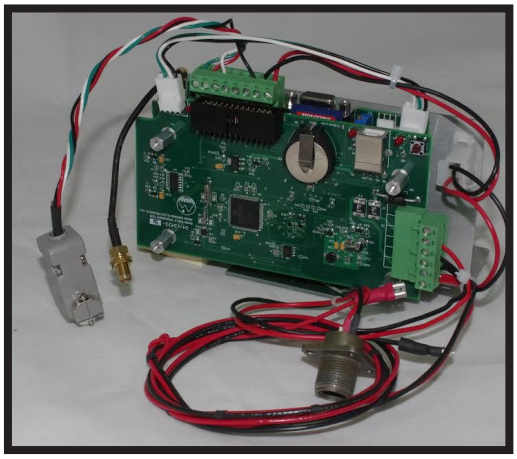
3324 Upgrade Series ALERT2 Rain Gauge Upgrade Kit

- TDMA Reporting Eliminates Collisions
- Forward Error Correction
- Data Transmitted as Engineering Units
- Works Side-by-Side with Standard ALERT

PHONE: (800) 275-2080 HIGH SIERRA ELECTRONICS, INC. FAX: (530) 273-2089



DESCRIPTION:

The ALERT2 Rain Gauge Upgrade Kit - 3324 Upgrade Series is a cost effective way to upgrade a rain only monitoring site from Legacy ALERT to ALERT2. The ALERT2 Rain Gauge Upgrade kit can be used to upgrade High Sierra Electronics (HSE) transmitter Models 3206 and 3201 and the Model 5096 transmitter which has been manufactured over the years by Sierra Misco, NovaLynx, and HydroLynx. The upgrade kit hardware mounts quickly and easily in your existing transmitter's chassis using the included wiring harnesses to connect to your transmitter's battery and radio (Maxon or Midland).

The ALERT2 Rain Gauge Upgrade Kit transmitter is compatible with tipping buckets using either standard momentary (2-wire) or 3-wire format reed switches. The existing 26 pin ribbon cable from the top plate connector board of your chassis is pin compatible with the 26 pin connector on the upgrade kit's circuit board. It includes 16 GB of data logging memory on a removable SD card.

The ALERT2 Rain Gauge Upgrade transmitter is supplied on a mounting bracket that simply replaces the radio / power amp mounting bracket in the Model 3206 or 3201 transmitters. In the 5096 transmitter the upgrade kit's bracket can be mounted by drilling 8 holes in the aluminum center plate or with the optional 3324-96 mounting plate that will simply replace the 5096 transmitter's circuit board. Whether you are replacing your HSE transmitters or another manufacturers you will need to drill a 1/4 inch (0.635 cm) hole in the transmitter's top plate to accommodate the bulkhead GPS antenna connector which is supplied (GPS antenna, cable, and mounting hardware sold separately).

ALERT2 is the next generation data format for Hydological and Meteorological Data Collection Systems. A Rain Gauge using the ALERT2 protocol reports each tip of the bucket with a time stamp for when the tip occurred. Utilizing faster baud rates for transmission, more data can be sent in shorter messages. This increase in data capacity allows for the transmission of field data in calibrated, floating point engineering units, and also provides a tremendous increase in the number of available Station IDs. Another significant advancement offered by ALERT2, is the ability to assign TDMA (Time Division Multiple Access) time slots for each transmitter and repeater. This capability eliminates data collisions and ensures exceptional system data throughput even during extreme weather events. This report scheduling capability is possible due to the precise timekeeping enabled by the onboard GPS Receiver. The increased message capacity of ALERT2 also allows for the inclusion of Forward Error Correction to help minimize transmission errors that can occur over noisy channels.

The ALERT2 Rain Gauge Upgrade Kit - 3324 Upgrade Series is part of the 33XX family of transmitters and like all transmitters in the family you can easily program them using the downloadable Insight software which is supplied at no additional charge for your use.

02-3324-02(C)

Model 3324-02 ALERT2 Rain Gauge Upgrade

SPECIFICATIONS:

Sensor Inputs	1 precipitation (external) and battery voltage (internal), GPS status (internal)
Sampling Interval	0 seconds to 18 hrs, programmable
Sampling Modes	Timed-defined and/or event
Reporting Interval	0 seconds to 596523 hrs, programmable
Event Change to Report	0 to 65535 counts
Reporting Override Value	0 to 65535 counts
Data Logging Modes	Timed-defined and/or on transmission
Data Logging Interval	0 to seconds 596523 hrs, programmable
Data Format	ALERT2
Recorded Data	0-65535 for Rain & Floating Point for Battery
Memory	16 GB SD Card
Real Time Clock	Clock/calendar with on-board battery back up with leap year correction, syncs with GPS
Transmission Baud Rate	4800
TDMA	
Slot Size	Selectable: 0.5, 1, 1.5, & 2.5, 3, 5 seconds
Frame Size	Selectable: 15, 30, 45, 60, 90, 120 seconds
On-Board GPS Receiver	
Sensitivity	<-163 dBm
Channels	48
GPS Connector	Reverse SMA female
Radio Frequency Range	VHF 136 to 174 MHz @ 5 W, UHF and other bands available
Operating Voltage	12 to 18 VDC
Current Draw	< 1.8 mA standby, < 3 A transmitted
Lightning Protection	Standard on all inputs
Solar Input Connector	MS
Radio Connector	BNC
Operating Temperature Range	-40° to 140° F (-40° to 60° C)
Storage Temperature Range	-58° to 158° F (-50° to 70° C)
Dimensions	3.5 x 6.3 x 3.3 in (8.9 x 15.9 x 8.3 cm)
Weight	12 oz (340 grams)
Shipping Weight	2 lbs 12 oz (1.2 kg)

ORDER GUIDE:

Model 3324-01	ALERT2 Rain Gauge Only Upgrade Package, for Model 3201 transmitters with existing NEMA Enclosure
Model 3324-02	ALERT2 Rain Gauge Data Transmitter Upgrade Kit, for Model 3206 transmitter with Canister Enclosure
Model 3324-96	ALERT2 Rain Gauge Data Transmitter Upgrade Kit, with 5096 Adapter Hwd

OPTIONS/SPARE PARTS:

Model 7135-01	Cable GPS set, 5 ft (1.5 m) Male TNC to Male N-Type, 15 ft (4.6 m) Male N-Type to Male SMA, RG58, GPS antenna, mounting bracket with lightning protection
Model 7135-02	Cable GPS set, 20 ft. (6.1 m), Male TNC to Male SMA, RG58, GPS antenna, mounting bracket without lightning protection
Model 7135-11	Cable GPS set, 5 ft (1.5 m) Male TNC to Male N-Type, 3 ft (0.9 m) Male N-Type to Male SMA, RG58, GPS antenna, mounting bracket with lightning protection
Model 7135-12	Cable GPS Set, 5 ft. (1.5 m), Male TNC to Male SMA, RG58, GPS antenna, mounting bracket without lightning protection

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