



Vantage Pro2™ Systems

The Envoy8X (# 6318) receives and logs data simultaneously from up to eight transmitting stations, in any combination. Envoy8X includes robust software that allows for data from many sensors and multiple Envoy8Xs to produce very large databases in Microsoft Access®, MySQL®, or Microsoft SQL Server®. You select which sensors to log and choose a logging interval from 10 seconds to 2 hours. You can even add select third-party sensors that report readings in a 0-3 volt range. Data can be easily exported to a spreadsheet program such as Excel® or to WeatherLink® to take advantage of WeatherLink’s graphing and reports.

Envoy8X has built-in temperature and humidity sensors, as well as a barometer. The software will report data from those sensors as “inside” data, effectively giving you a ninth “station.” You may connect an external temperature probe (6475 or 6477) to replace the Envoy8X’s internal temperature probe. Receives data from all Vantage Pro2 radios and repeaters. Includes an AC adapter, may also be run using Solar Power Kit (7707). Backup power provided by three AA batteries. (Lithium batteries are recommended for low temperature applications.) Requires WeatherLink for Windows (USB or Serial).

Includes Weather Data Transfer Utility for Envoy8X software. System requirements: Windows XP® SP3, Vista®, or 7 operating system. 32 MB memory (64 MB recommended); VGA/SVGA monitor (800 x 600 or higher recommended). MS Access run-time engine is included. MS Excel, MySQL and SQL Server are not included.

General

Operating Temperature	+0° to +140°F (-18° to +60°C)
Storage Temperature	-22° to +158°F (-30° to +70°C)
Current Draw	0.90 mA average, 20 mA peak, (plus 0.125 mA for each optional wireless transmitter in use) at 4 to 6 VDC
AC Power Adapter	5 VDC, 200 mA, regulated
Backup Batteries	3 AA-cells
Battery Life	up to 4 months, depending on number of transmitting stations received
Connectors	Modular RJ-11
Housing Material	UV-resistant PVC plastic
Dimensions (length x width x height)	6.5" x 1.5" x 3.75" (165 mm x 38 mm x 95 mm)
Weight (with batteries)	0.58 lbs. (0.26 kg)

Communication

Transmit/Receive Frequency	US Models: 902-928 MHz FHSS, Overseas Models: 868.0 - 868.6 MHz FHSS.
ID Codes Available	8
Output Power	902-928 MHz FHSS: FCC-certified low power, less than 8 mW, no license required 868.0 - 868.6 MHz FHSS. CE-certified, less than 8 mW, no license required
Range	
Line of Sight	up to 1000 feet (300 m)
Through Walls	200 to 400 feet (75 to 150 m)

Sensor Inputs

RF Filtering	RC low-pass filter on each signal line
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Sensor Data From Envoy8X

Barometric Pressure (sensor located in Envoy8X)

Resolution and Units	Measured in 0.01" Hg. Other units are converted from Hg and rounded to nearest 0.1 mm, 0.1 hPa, 0.1mb.
Corrected Range	26.00" to 32.00" Hg, 660 to 810 mm Hg, 880 to 1080 hPa or mb
Uncorrected Range	16.00" to 32.50" Hg, 410 to 820 mm Hg, 540 to 1100 hPa or mb
Elevation Range	-1500' to +15,300' (-460 m to 4670 m)
Uncorrected Reading Accuracy	±0.03" Hg (±0.8 mm Hg, ±1.0 hPa/mb) (at room temperature)
Sea-Level Reduction Equation Used	Altimeter
Equation Source	NOAA
Equation Accuracy	±0.01" Hg (±0.3 mm Hg, ±0.3 hPa/mb)
Elevation Accuracy Required	±10' (3m) to meet equation accuracy specification
Overall Accuracy	±0.04" Hg (±1.0 mm Hg, ±1.4 hPa/mb)
Trend (change in 3 hours)	Change ±0.06" (2.0 hPa/mb, 1.5 mm Hg) = Rapidly Change ±0.02" (0.7hPa/mb, 0.5 mm Hg) = Slowly
Trend Indication	5 position arrow: Rising (rapidly or slowly), Steady, or Falling (rapidly or slowly)
Update Interval	1 minute
Current Data	Instant, 15-min., and Hourly reading; Daily, Monthly High and Low
Historical Data	15-min. and hourly reading; Daily Monthly Highs and Lows
Alarms	High Threshold from Current Trend for Storm Clearing (Rising Trend) Low Threshold from Current Trend for Storm Warning (Falling Trend)
Range for Rising and Falling Trend Alarms	0.01 to 0.25" Hg (0.1 to 6.4 mm Hg, 0.1 to 8.5 hPa/mb)

Humidity

Inside Relative Humidity (sensor located in Envoy8X)	
Resolution and Units	1%
Range	1 to 100% RH
Accuracy	±3% from 1% to 90%; ±5% from 90% to 100%
Update Interval	1 minute
Current Data	Instant (user adjustable) and Hourly Reading; Daily, Monthly High and Low
Historical Data	Hourly Readings; Daily, Monthly Highs and Lows
Alarms	High and Low Threshold from Instant Reading

Temperature

Inside Temperature, sensor located in Envoy8X, or optional external temperature probe	
Resolution and Units	Current Data: 0.1°F or 1°F or 0.1°C or 1°C.(nominal). Celsius is converted from Fahrenheit and rounded to the nearest 0.1° or 1°C.
Historical Graph Data and Alarms:	1°F or 1°C (user selectable).
Range	
Inside	+0° to +140°F (-18° to +60°C)
External probe.	-40° to +150°F (-40° to +65°C)
Sensor Accuracy	±1°F (±0.5°C) typical
Update Interval	1 minute
Alarms	High and Low Thresholds from Instant Reading

Clock

Resolution	1 minute
Units	Time: 12 or 24 hour format (user-selectable) Date: US or International format (user-selectable)
Accuracy	±8 seconds/month
Adjustments	
Time	Automatic Daylight Savings Time (for users in North America, Europe and Australia that observe it in AUTO mode, MANUAL setting available for all other areas)

Date. Automatic Leap Year

Package Dimensions

Product #	Package Dimensions (Length x Width x Height)	Package Weight	UPC Codes
6318	10.25" x 5.63" x 3.0" (260 mm x 143 mm x 76 mm)	1.14 lbs. (517 g)	011698009459
6318EU		1.15 lbs. (522 g)	011698009466
6318UK		1.25 lbs. (567 g)	011698009473