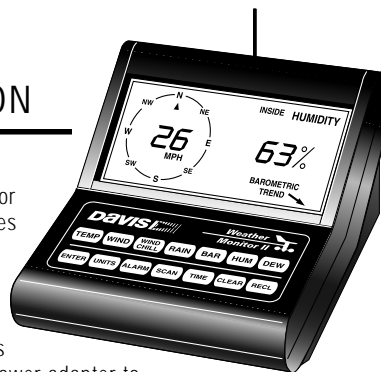


WIRELESS WEATHER MONITOR II® STATION

7440W
STATIONS



The Wireless Weather Monitor II station is comprised of two components: the sensor array which houses and manages the external sensors; and the console which provides A/D conversion, calculations, and data display. The transmission of data between the sensor array and the console is completely wireless; it uses an FCC-certified, license-free transmitter and receiver. User-selectable ID codes allow up to eight stations to coexist in the same geographic area. The station is available in two versions: one version's sensor array is powered by a solar panel; the other version's is powered by a DC-power adapter or lithium battery. Both versions include a DC-power adapter to power the console. A WeatherLink may be added to this station for data logging and communication with a computer.

SPECIFICATIONS

General

Console Operating Temperature	-5° to 140° F (-20° to 60° C)
Display Temperature	32° to 140° F (0° to 60° C)
Sensor Array Operating Temperature	-40° to 140° F (-40° to 60° C)
Console Power Supply	30 mA (typical) at 10 to 16 VDC (125 mA when display is illuminated)

Sensor Array Power Requirements

Options	6-12 VDC power adapter, CR-123 Lithium Battery, or Davis Solar Charger
Consumption	120 μ A
Battery Life	Will operate 1 year on 2 CR-123 camera batteries
Solar Life	Will operate indefinitely

Transmit / Receive Frequency	916.5 MHz
ID Codes Available	8
Output Power	FCC-certified low power, less than 1 mW (does not require a station license)

Range

Direct Line of Sight	400' (130m)
Through Walls	100 to 200' (30 to 60m)

Console Housing Material Black ABS plastic

Console Display Type LCD

Dimensions

Console	5.25" x 5.4" x 3.0" (133 mm x 137 mm x 76 mm)
Sensor Array	10" x 18" x 34" (250 mm x 460 mm x 860 mm)
Display	4.4" x 1.9" (112 mm x 48 mm)

Weight

Shipping	23 lbs. (10.5 kg)
Console	12 oz. (0.34 kg)
Sensor Array	14 lbs. (6.4 kg)

Sensor Outputs (as displayed on console)

Outside Temperature (Air)

Resolution and Units	0.1°F or 0.1°C (user-selectable)
Range	-40° to 140° F (-40° to 60° C)
Accuracy	\pm 1.5°F (\pm 0.75°C)
Update Interval	16 seconds
Functions	Current Temperature (high and low alarms), Maximum and Minimum Temperatures (including time and date occurred, values can be cleared by user)

Inside Temperature (Air) (sensor located inside console)

Resolution and Units	0.1°F or 0.1°C (user-selectable)
Range	32° to 140° F (0° to 60° C)
Accuracy	±1°F (±0.5°C)
Update Interval	16 seconds
Functions	Current Temperature (high and low alarms), Maximum and Minimum Temperatures (including time and date occurred, values can be cleared by user)

Wind Speed

Resolution and Units	1 mph, 1 km/hr, 0.1 m/s, or 1 knot (user-selectable)
Range	2 to 175 mph, 4 to 280 km/hr, 0.9 to 78 m/s, 2 to 152 knots
Accuracy	±5%
Update Interval	2.5 seconds
Functions	Current Speed (alarm), Maximum Speed (including time and date occurred, values can be cleared by user)

Wind Direction

Display Resolution	16 points (22.5°) on compass rose, 1° in digital display
Accuracy	±7°
Update Interval	2.5 seconds

Wind Chill

Resolution and Units	1°F or 1°C (user-selectable)
Range	-134° to 98°F (-92° to 37°C)
Accuracy	±4°F (±2°C)
Update Interval	16 seconds
Functions	Current Wind Chill (alarm), Maximum Wind Chill (including time and date occurred, values can be cleared by user)

Rainfall (specify English or Metric rain gauge)

Resolution and Units	0.01" or 0.2 mm (user-selectable)
Daily Rainfall Range	0 to 40.95" (0 to 819 mm)
Total Rainfall Range	0 to 99.99" (0 to 9999 mm)
Accuracy	±(4% + 1 count) for rates from 0.01" to 2" (0.2 to 50 mm) per hour ±(5% + 1 count) for rates from 2" to 4" (50 to 100 mm) per hour
Update Interval	10 seconds (Rain counts accumulate at sensor array until received by console)
Functions	Total Rainfall, Storm Rainfall (values accumulate until cleared by user)

Barometric Pressure (sensor located inside console)

Resolution and Units	0.01" of Hg, 0.1 mm of Hg, or 0.1 hPa (user-selectable)
Range	26" to 32", 660 to 810 mm, 880 to 1080 hPa
Accuracy	±0.05", ±1.3 mm, ±1.7 hPa (at room temperature)
Trend (change in 1 hour)	±0.2", ±5.0 mm, ±7.0 hPa
Update Interval	16 seconds
Functions	Current Barometric Pressure, Current Barometric Pressure Trend

Relative Humidity

Display Resolution	1%RH
Range	10 to 90% inside, 0 to 100% RH outside
Accuracy	±5%
Update Interval	16 seconds inside, 1 minute outside
Functions	Current Relative Humidity (high and low alarms), Maximum and Minimum Relative Humidity Values (including time and date occurred, values can be cleared by user)

Dewpoint

Resolution and Units	1°F or 1°C (user-selectable)
Range	-99° to 140° F (-73° to 60° C)
Accuracy	±4°F (±2°C)
Functions	Current Dewpoint

Time

Accuracy	±15 seconds/month
Functions	Current Time (alarm), Current Date

STATION CONNECTION DIAGRAM

