

Weather Monitor II[®] Station

7440
7440CS



The Weather Monitor II station features the following: anemometer, inside and outside temperature sensors, inside relative humidity sensor, barometric pressure sensor, junction box, and console. The console provides A/D conversion, calculations, and data display. A DC-power adapter and an 8' (2.4m) cable (for connecting the junction box and console) are included. Options include the Rain Collector, the External Temperature/ Humidity Sensor, and the WeatherLink, which provides data logging and a serial interface to a computer.

General

Operating Temperature	.....	-5° to 140° F (-20° to 60° C)
Display Temperature	.....	32° to 140° F (0° to 60° C)
Supply Power (adapter included)	.....	16 mA (typical) at 10 to 16 V (100 mA when display is illuminated)
Connectors	.....	Modular (RJ-11, RJ-12, and RJ-45)
Recommended Maximum Cable Length	.....	240' (72 m), junction box to 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)
Display	.....	4.4" x 1.9" (112 mm x 48 mm)
Weight, total	3 lbs. 6 oz. (1.53 kg)

Sensor Inputs

RF Filtering	RC low-pass filter on each signal line
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Data Displayed on Console

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	.....	26.00" to 32.00", 660.0 to 810.0 mm, 880.0 to 1080.0 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
Functions	.....	Current Barometric Pressure, Current Barometric Pressure Trend, Stored Barometric Pressure Reading

Dewpoint (requires External Temperature/Humidity Sensor)

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

General

Update Interval	.....	16 seconds
Times and Dates of Maximum and Minimum Values	.....	Stored with value

Rainfall (requires Rain Collector)

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)
Rainfall Accuracy	.....	±(4% + 1 count) for rates from 0.01" to 2" (.2 mm to 50 mm) per hour ±(5% + 1 count) for rates from 2" to 4" (50 mm to 100 mm) per hour

Functions (Period is selected by user) Total Rainfall for period, Daily Rainfall Amount (alarm)

Relative Humidity (inside humidity included, requires External Temperature/ Humidity Sensor for outside)

Range 10 to 90% inside, 0 to 100% RH outside
 Accuracy $\pm 5\%$ inside, $\pm 3\%$ outside
 Functions Current RH (high and low alarms), Maximum and Minimum RH Values

Temperature

Outside Temperature (Air)

Resolution and Units 0.1°F or 0.1°C (user-selectable)
 Range -50° to 140° F (-45° to 60° C)
 Accuracy $\pm 1^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$)
 Functions Current Temperature (high and low alarms), Maximum and Minimum Temperatures

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 $\pm 1^\circ\text{F}$ ($\pm 0.5^\circ\text{C}$)
 Functions Current Temperature (high and low alarms), Maximum and Minimum Temperatures

Time

Accuracy ± 15 seconds/month
 Functions Current Time, Current Date

Wind

Wind Chill

Resolution and Units 1°F or 1°C (user-selectable)
 Range -134° to 98° F (-92° to 37° C)
 Accuracy $\pm 4^\circ\text{F}$ ($\pm 2^\circ\text{C}$)
 Functions Current Wind Chill (alarm), Minimum Wind Chill

Wind Direction

Display Resolution 16 points (22.5°) on compass rose, 1° in digital display
 Accuracy $\pm 7^\circ$

Wind Speed

Resolution and Units 1 mph, 1 km/hr, 0.1 m/s, or 1 knot (user-selectable)
 Range (large wind cups) 2 to 150 mph, 2 to 130 knots, 1 to 67 m/s, 3 to 241 km/h
 Range (small wind cups) 3 to 175 mph, 3 to 150 knots, 1.5 to 79 m/s, 5 to 282 km/h
 Update Interval 2.25 seconds
 Accuracy (large wind cups) ± 2 mph (2 kts, 3 km/h, 1 m/s) or $\pm 5\%$, whichever is greater
 Accuracy (small wind cups) ± 3 mph (3 kts, 5 km/h, 1.5 m/s) or $\pm 5\%$, whichever is greater
 Functions Current Speed (alarm), Maximum Speed

Package Dimensions

Product #	Package Dimensions (Length x Width x Height)	Package Weight	UPC Codes
7440	18.00" x 10.25" x 3.13" (458 mm x 261 mm x 274 mm)	3.7 lbs. (1.68 kg)	011698 74400 8
7440EU			011698 74401 5
7440UK			011698 74402 2
7440CS	17.62" x 9.00" x 12.00" (448 mm x 229 mm x 305 mm)	8.9 lbs. (4.04 kg)	011698 74404 6
7425CSEU			011698 74406 0
7425CSUK			011698 74405 8

Station Connection Diagram

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