



ClimaVUE™50

The ClimaVUE 50 from Campbell Scientific is a complete weather station. Compact, low power, and simple to install, it has no moving parts and requires minimal maintenance.

Measurements

- Air temperature
- Barometric pressure
- Vapor Pressure
- Relative humidity
- Precipitation
- Wind direction
- Wind speed
- Solar radiation
- Lightning strike
- Lightning average distance
- Tilt (to ensure accuracy of rain gauge).

Air Temperature

Measurement Range: -50° to +60°C

Resolution: 0.1°C

Accuracy: ±0.6°C

Barometric Pressure

Operating Temperature: -40° to +60°C

Measurement Range: 500 to 1100 hPa

Resolution: 0.1 hPa

Accuracy: ±1 mb (-10° to +50°C) or

±5 mb (-40° to +60°C)

Vapor Pressure

Measurement Range: 0 to 47 kPa

Resolution: 0.01 kPa

Accuracy or Repeatability: ±0.2 kPa typical below 40°C.

Relative Humidity

Measurement Range: 0 to 100%

Resolution: 0.1

Accuracy: ±3% RH typical

Precipitation

Measurement: 0 to 400 mm/h (15.75 in./h)

Resolution: 0.017 mm

Accuracy: ±5% of measurement (from 0 to 50 mm/h or 0 to 1.97 in./h)

Wind Speed

Wind Speed Maximum: 10 s gust

Measurement Range: 0 to 30 m/s (0 to 67 mph)

Resolution: 0.01 m/s (0.02 mph)

Accuracy or Repeatability: 0.3 m/s or 3% (0.67 mph or 3%), whichever is greater

Wind Direction

Measurement Range: 0° to 359°

Resolution: 1°

Accuracy: ±5°

Solar Radiation

Measurement Range: 0 to 1750 W m⁻²

Resolution: 1 W m⁻²

Accuracy: ±5% of measurement (typical)

Spectral Range: 300 to 1150 nm

Lightning Strike Count

Measurement Range: 0 to 65,535 strikes

Resolution: 1 strike

Accuracy: > 25% detection at < 10 km typical (variable with distance)

Lightning Average Distance

Measurement Range: 0 to 40 km (0 to 24.9 mi)

Resolution: 3 km (1.86 mi)

Accuracy: Variable

Tilt

Measurement Range: -90° to +90°

Resolution: 0.1°

Accuracy: ±1°

Power

Min Supply Voltage: 3.6 Vdc continuous

Max Supply Voltage: 15.0 Vdc continuous

Typical Current Drain @ 12 Vdc: < 1 mA (average)

Power Consumption

Quiescent: 0.3 mA

Maximum Peak Current: 33 mA

Average, R7! Command every 10 s: 1.0 mA

Average, R7! Command every 60 s (or slower): 0.4 mA

General

Output: SDI-12

Compatibility: Any modern CSI data logger

Operating Temperature Range: -50° to +60°C (barometer and RH: -40° to +60°C)

Typical Measurement Duration: 110 ms

Maximum Measurement Duration: 3,000 ms

Maximum Polling Frequency: 10 s

Size & Weight

Diameter: 10 cm (4 in.) with rain gage funnel

Height: 34 cm (13.4 in.) with rain gage funnel

Weight: 839.15 g (1.85 lb)

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