

HY-WDS6E professional all in one weather station

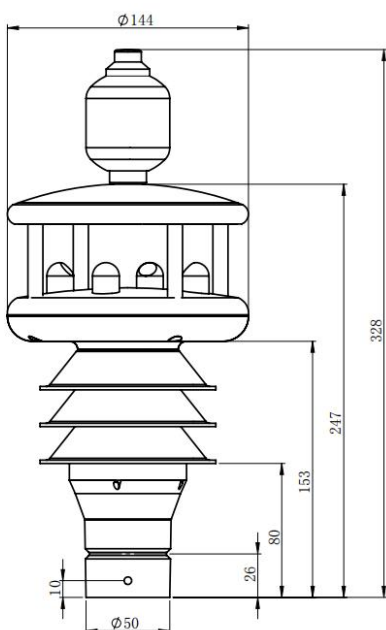
Introduction

HY-WDS6E is all in one weather station integrated with multiple modules. Wind measurement is based on our ultrasonic technology, it has no fear of the damage commonly experienced with more fragile cups/vane weather station. Without the need for expensive on-site calibration or maintenance and with a corrosion free exterior, HY-WDS6E is maintenance free, quick and easy to install. Shell is made by ASA engineering plastic, which has high outdoor weather ability. ASA is extremely resistant against UV radiation of sun, it is frost and heat resistant, standing all climatically conditions for over 10 years. HY-WDS6E can realize simultaneous measurement of multi-parameters: wind, temperature, humidity, pressure and precipitation, solar, luminance, dust, noise. Precipitation is detected by 24G radar or piezoelectric module.

Application

Weather observation
Emergency services
Coastal and ocean buoys
Agriculture and horticulture
Environmental monitoring

Dimension



Specification

Wind Speed: 0 ~ 60m/s Principle: Ultrasonic
80m/s is optional with extra cost
Resolution: 0.1 m/s Accuracy: $\pm 2\%$

Wind Direction: 0 ~ 360° Principle: Ultrasonic
Resolution: 1° Accuracy: $\pm 3^\circ$
2 minutes, 10 minutes secondary calculated
Minimum, Maximum, Averaged
wind, gust, compass, GPS, true wind speed and direction are optional with extra cost.

Temperature: -40~+80°C Principle: NTC
Resolution: 0.1°C Accuracy: $\pm 0.5^\circ\text{C}$

Humidity: 0-100% Principle: Capacitive
Resolution: 0.1% Accuracy: $\pm 2\%$

Pressure: 150-1100hPa Principle: Piezoelectric
Resolution: 0.1hPa Accuracy: ± 1 hPa

Precipitation: 0-500mm/hr
Principle: 24G radar or piezoelectric
Radar module can identify rain, snow, hail
Resolution: 0.01mm/hr Accuracy: $\pm 10\%$

Luminance: 0-200000lux Principle: photoelectric
Resolution: 1 lux Accuracy: $\pm 5\%$

Solar Radiation: 0-2000W/m²
Principle: photoelectric
Resolution: 1 W/m² Accuracy: $\pm 5\%$

PM1.0/PM2.5/PM10: 0-500ug/m³
Principle: laser scattering
Resolution: 1 ug/m³ Accuracy: $\pm 10\%$

Visibility: 10~10000 meters Principle: laser
Resolution: 1 m Accuracy: $\pm 20\%$

Noise: 30-130 dB Principle: microphone
Resolution: 0.01 dB Accuracy: $\pm 3\text{dB}$

Interface: RS232 or RS485
Protocol: ASCII, ASCII polled, NMEA0183,
MODBUS-RTU, SDI-12
Baud: 1200~115200 bps

Power consumption: 7-30 VDC < 110 mA
Operating: Temp: -50 ~ +70°C Hum.: 0~100%

