



drexel®

# WEATHER STATION MODEL NO: DX4P-WS





## Product Brief

DX4P-WS is compact weather station which integrates six meteorological parameters, i.e. Ambient Temperature, Relative Humidity, Atmospheric Pressure, Wind Speed (Third Generation), Wind Direction (Third Generation) and Piezoelectric Rainfall, in one structure. It monitors 24 hours continuous online data of outdoor meteorological parameters, and the output data is transferred through digital communication interface to server.

## Application

- Micro Environmental Monitoring
- Meteorological Traffic Monitoring
- Photovoltaic Environment Monitoring
- Agricultural Meteorological Monitoring
- Grid Environment Monitoring
- Meteorological Monitoring for Smart City
- Meteorological Monitoring

## Features

- Compact size
- High integration
- Easy to install
- Protective cover with heat insulation
- Up to 16 additional parameter possible.
- Integrated design
- Moduler with no moving parts
- One year warranty

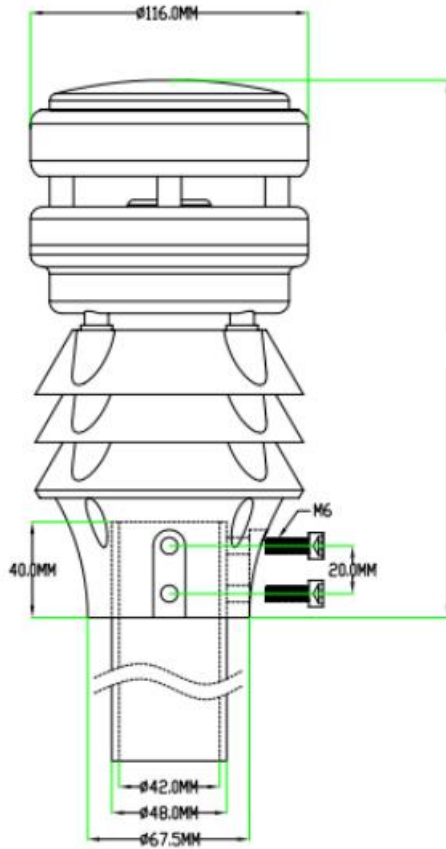


## Product Technical Data

Parameters	Measuring Range	Accuracy	Resolution	Sampling Frequency
Ambient Temperature	-45-80°C	±0.2°C calibrate at 25°C	0.01°C	1sec to 10 sec
Relative Humidity	0-100%RH	±3%RH (10%-80%RH, No Condensation)	0.01%RH	1sec
Wind Speed	0-40m/s	± (0.3+0.03V) m/s; V≤30m/s ± (0.3+0.05V) m/s; V≥30m/s (V stands for standard wind speed in a wind tunnel)	0.01m/s	10sec
Wind Direction	0-359.9°	±2° (when Wind Speed <10m/s)	0.1°	10sec
Atmospheric Pressure	500-1100hPa	±0.5hPa (25°C, 950-1100hPa)	0.1hPa	1sec
Piezoelectric Rainfall	0-200mm/h	±10%	0.1mm	1sec
Operating Temperature	-30°C+70°C			
Output	RS485 output for interfacing to server devices/PC			
Maximum Output Frequency	Passive Mode: 1/S Active Mode: 1/min			
Power Supply	DC9-24V			
Level of Protection	IP65			



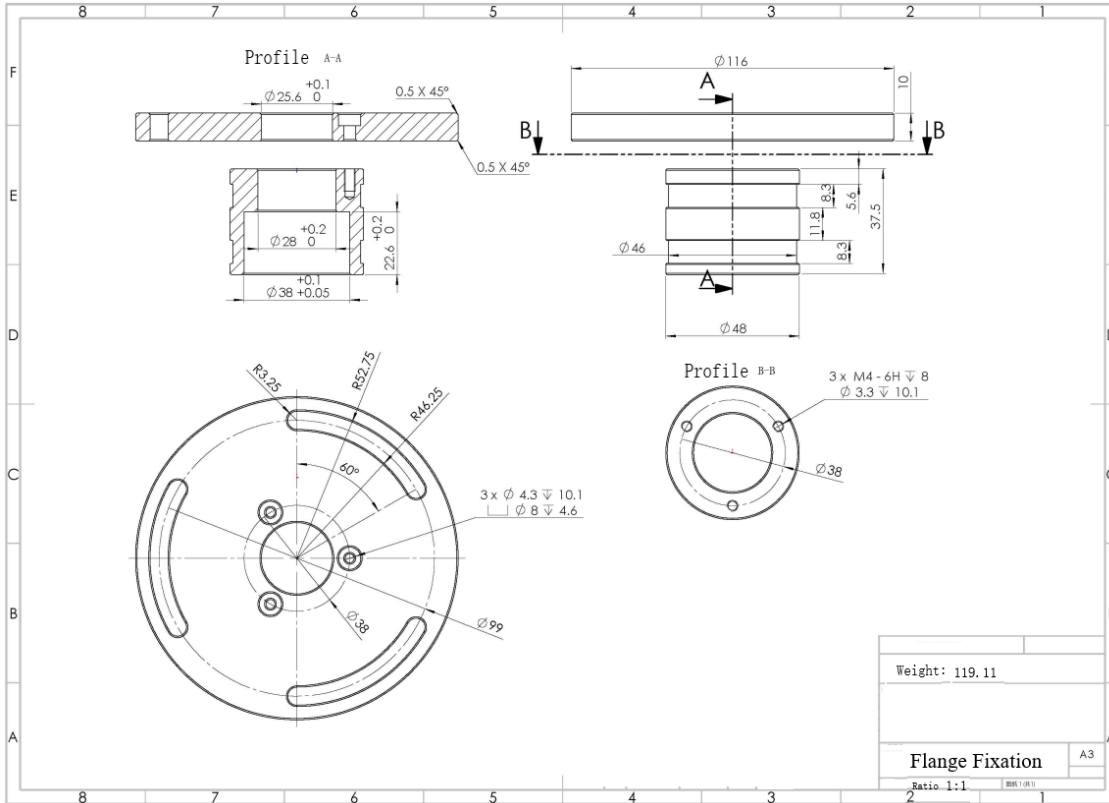
◆ **Product Dimension**



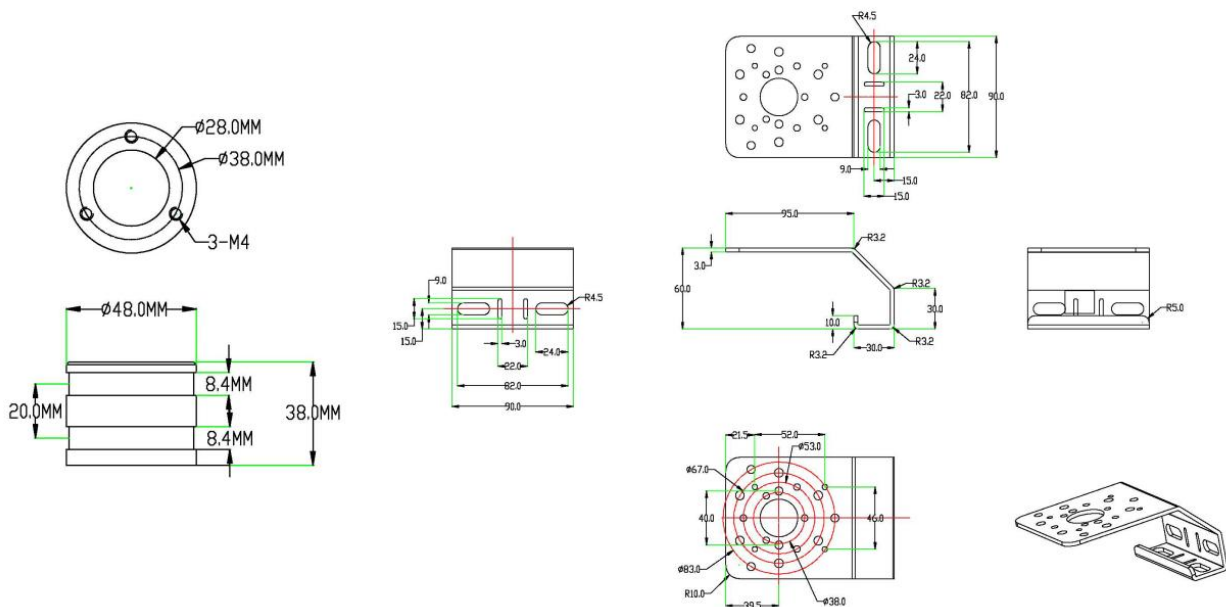


## Accessory and Parts

### Flange Mounting Manner:



### Bending Plate Mounting Manner:





## ● Brief Description

1. The System assemble is installed in three layer outdoor radiation protected shield for basic parameter Ambient Temperature, Relative Humidity and Atmospheric Pressure integrated, is installed in a three-layer outdoor radiation shield. The radiation shield connects to the main frame .The interior is sprayed with thermal insulation layer, to minimize the solar radiation influence.
2. Wind Speed, Wind Direction: The wind speed and wind direction is measured by ultrasonic principle, and the data of instantaneous wind speed, instantaneous wind direction is recorded.
3. Piezoelectricity measures rainfall: The amount of rainfall is calculated by measuring the size of raindrops by their impact on the external surface. Compared with the traditional physical bucket rain gauge, the accuracy of the piezoelectric rain gauge is its weakness. In most cases, the measurement value of the piezoelectric rain gauge will be close to the bucket rain gauge, but there will be significant deviation for special cases (short period of heavy rainfall). The circular arc roof design does not retain rainwater, can work all day without maintenance. Small size, no moving parts, easy to install.