

Data Logger

iDLog-120



OVERVIEW

iDLog-120 will be able to hook up all sorts of sensor, collecting and processing the sensor data.

iDLog-120 supplying several I/O ports, is manufactured to customize service you want and it will be able to be adjusted for sensor suite.

FEATURES

- ⊕ High performance ARM CPU
- ⊕ Certified Product from certificate authority
- ⊕ Supporting all sorts of sensor suite
- ⊕ Built in Solar charger
- ⊕ Supporting setting function of I/O sensor suite
- ⊕ Supporting Wire-Wireless Network
- ⊕ Management
 - CLI & WMI (Web Management Interface)
 - supply UI to check data collected in real time

SPECIFICATIONS

- ⊕ Processor : ARM Cortex-A5 533MHz
- ⊕ Memory : DDR2 256MB
- ⊕ Storage : 256MB & Micro SD Card (Until 16GB)
- ⊕ OS : LINUX 3.10.X
- ⊕ Communication-Interface :
 - 10/100/1000Mb Ethernet * 1 port
 - USB 2.0 * 1 port
- ⊕ Digital Interface :
 - RS-232 * 4 ports
 - RS-422/485 * 2 ports
 - TTL I/O & Low Frequency Pulse counter * 8 ports
 - Analog Frequency Counter * 2 ports
- ⊕ Analog Interface :
 - AD Converter 0~5V 12bit : Single * 8 ports, Differential * 4 ports
 - AD Converter -2.5V~2.5V 12bit : Single 8 ports, Differential * 4 ports
 - Current Driver * 2 ports
 - Reference Voltage * 3ports
- ⊕ Input Power : 9V ~ 24V
- ⊕ Operating Environment :
 - Temperature : -40 ~ 80 °C

Radar Water Level Sensor

IWLRV40



OVERVIEW

The IWLRV40 radar sensor monitors the water level of rivers, lakes. The sensor is ideal for areas where submersed sensors can be damaged due to corrosion, contamination, flood-related debris, lightning, or vandalism. It emits short microwave pulses and then measures the elapsed time between the emission and return of the pulses. The elapsed time measurement is used to calculate the distance between the sensor and the target (for example, water, grain, slurry). The distance value can then be used to determine depth of the medium.

FEATURES

- ⊕ Light, compact housing
- ⊕ Sensor is away from the water, making the installation safer to achieve
- ⊕ Extremely low power consumption – can be easily used at remote locations
- ⊕ Non-contact measurement – ideal for flood measurement
- ⊕ Compact and solid design – long sensor life with minimal maintenance
- ⊕ Standard interfaces for communication with data loggers

SPECIFICATIONS

- ⊕ Measuring range : 0.1 ... 40 m
- ⊕ Accuracy : ± 0.1 %
- ⊕ Measuring time: 2...20 seconds;
- ⊕ Beam angle of antenna (width of beam) :
Horizontal 6 °, Vertical 6 °
- ⊕ Transmit frequency : 60 GHz
- ⊕ Power supply : 3.6 ... 16 V
- ⊕ Interfaces : RS485
- ⊕ Dimensions : 95mm(L) x 120 mm(W) x 170mm(H)
- ⊕ Weight : approx. 1.2kg
- ⊕ Operating temperature : -40 ... +80 °C
- ⊕ Materials : Aluminum pressure die-casting with stainless (Horn)

Precipitation sensor

IRG05



OVERVIEW

The IRG05 is a high-end tipping bucket rain gage with an 200 mm orifice and a heavy-duty cast stainless base. It measures precipitation in 0.5 mm increments. The IRG05 is ideal for locations where intense rainfall events may occur. This tipping bucket is compatible with all any data loggers and is used in environmental monitoring applications

FEATURES

- ⊕ More accurate measurement of high-intensity precipitation
- ⊕ Extra-heavy metal construction for durability and long life
- ⊕ High precision—tips at 0.5mm increments
- ⊕ Compatible with most any data loggers
- ⊕ Accuracy is ± 3 percent at high precipitation rates of 300 mm/hr.

SPECIFICATIONS

- ⊕ Sensor Type : Tipping bucket
- ⊕ Accuracy :
 - ± 0.5 % in case of 20mm/hr. or less
 - ± 3 % in case of 20mm/hr. or more
- ⊕ Rainfall per Tip : 0.5mm
- ⊕ Measurement Range : 0 to 700 mm/h
- ⊕ Operating Temperature Range : 0° to 70°C
- ⊕ Humidity Range : 0 to 100%
- ⊕ Orifice Diameter : 200mm
- ⊕ Height : 520mm
- ⊕ Output signal : Pulse counter

Precipitation sensor

IWD100



OVERVIEW

The IWD100 is a counter-balanced, low-threshold, optoelectronic wind vane. Infrared LEDs and phototransistors are mounted on eight orbits on each side of a 8-bit GRAY-coded disc. Turned by the vane, the disc creates changes in the code received by the phototransistors.

FEATURES

- ⊕ Low starting threshold
- ⊕ Great dynamic characteristics
- ⊕ Strong corrosion resistant ability
- ⊕ Easy installation
- ⊕ The sensor is marked with a point in the north(N) direction

SPECIFICATIONS

- ⊕ Sensor/Transducer Type :
Optical code disc(Gray code 8-bit)
- ⊕ Accuracy : $\pm 0.7^\circ$
- ⊕ Observation Range : 0 ~ 360°
- ⊕ Starting threshold <0.5m/s
- ⊕ Operating Temperature Range :
-40° ~ 70°C at wind speed within 75m/s
- ⊕ Resolution: 1°
- ⊕ Output : Digital – RS-232 / Analog – 4~20mA(Option)

Precipitation sensor

IWS100



OVERVIEW

The IWS100 is a fast response, low-threshold anemometer. Three lightweight, conical cups mounted on the cup wheel, provide excellent linearity over the entire operating range, up to 75 m/s.

FEATURES

- ⊕ Low starting threshold
- ⊕ Strong corrosion resistant ability
- ⊕ Easy installation

SPECIFICATIONS

- ⊕ Sensor/Transducer Type :
Cup anemometer/opto-chopper
- ⊕ Accuracy :
(Below 10m/s) – 0.3m/s or better
(above 10m/s) – 3% or better
- ⊕ Observation Range : 0 ~ 75m/s
- ⊕ Starting threshold <0.5m/s
- ⊕ Operating Temperature Range :
-40° ~ 70°C at wind speed within 75m/s
- ⊕ Resolution: 0.1m/s
- ⊕ Output :
Analog : Pulse(0~2656Hz)
Analog : 4~20mA(Option)
Digital : Rs-232(Option)

Barometric Sensor

IBP100



OVERVIEW

The IBP100 barometer is a digital barometer based on a piezoresistive sensor that provides high measurement accuracy and superior long-term stability. 2sensors are used to continuously compare readings from the barometer pressure sensor with each other and determine if it is within the set criteria to provide reliable observation data.

The offset value can be applied directly to the sensor so that there is no deformation of the barometric pressure value when replacing the data logger

SPECIFICATIONS

- ⊕ Sensor/Transducer Type : Piezoresistive
- ⊕ Accuracy : $\pm 0.5\text{hPa}$ (500~1100hPa)
- ⊕ Observation Range : 400hPa ~ 1200hPa
- ⊕ Long-term stability : 0.1hPa/year
- ⊕ Interface : RS-232C
- ⊕ Response speed : Within a second

FEATURES

- ⊕ Installation on the inside wall of the main data logger cabinet
- ⊕ Designed to circulate air to the outside by opening a hole for barometric pressure measurement
- ⊕ Attaching the local display to the barometric pressure sensor

Precipitation sensor

IHP110



OVERVIEW

IHP110 is a trouble-free and cost-effective humidity transmitter with high accuracy and good stability. It is suitable for volume applications or integration into other manufacturers' equipment. HMP110 is also suitable for glove boxes, greenhouses, fermentation and stability chambers, data loggers, and incubators.

FEATURES

- ⊕ Miniature-size humidity transmitter
- ⊕ Low power consumption
- ⊕ Fast start-up for battery-powered applications
- ⊕ Cable detachable with standard M8 quick connector
- ⊕ IP65 metal housing

SPECIFICATIONS

- ⊕ Measurement range : 0~100%RH
- ⊕ Accuracy :
0~40°C : ±1.5%RH(0~90%RH), ±2.5%RH(90~100%RH)
-40~0°C and 40~80°C : ±3.0%RH(0~90%RH),
±4.0%RH(90~100%RH)
- ⊕ Temperature Measurement range : -40~80°C
- ⊕ Accuracy :
0~40°C : ±0.2°C
-40~0°C and 40~80°C : ±0.4°C
- ⊕ Input and outputs
Power consumption : 1mA average, mx. Peak 5mA
- ⊕ Operating voltage :
With 1V/2.5V output 5~28VDC, with 5V output
8~28VHD
- ⊕ Output :
2Channels : 0~1VDC / 0~2.5VDC / 0~5 VDC /
1~5VDC
1Channel loop-power converter : 4~20mA