

MetConnect One

Datasheet

Professional Weather Station

Easy to use, configurable multi-parameter weather stations

MetConnect allows users to build the system they need.

MetConnect contains a number of integrated sensors. Additional, user selected sensors can be added to build the system needed for a particular application.

MetConnect data is easy to use and reliable. The data from all the sensors is combined and output as a single string and is available on a range of communication protocols. Status codes can be included in the data to confirm the reliability of measurements.

MetConnect is designed to be simple to configure, install, and maintain. MetConnect is supported by easy-to-use configuration and data viewing software. In addition Gill offer a range of accessories and spares and experienced customer technical support.

Typical Applications

- Ports, marinas, data buoys, and commercial shipping.
- Meteorological measurement requiring separated sensors.
- Solar park management including wind, rain and solar intensity.
- Agricultural research combining rain, moisture and sunlight.

Key Features

- High quality integrated sensors including wind (speed and direction), temperature, humidity and pressure.
- Inputs for rainfall, PRT (temp) and two analogue sensors.
- Time synchronized data available via multiple output protocols.
- Compact, robust, design using 316 stainless steel and IP66/67 rating.
- Customer support available including set-up and display software and experienced customer technical support.

Benefits

- Easy to configure for a wide range of applications with high quality sensors and the ability to connect additional instruments.
- Easy installation due to the compact, integrated physical design.
- Easy set-up with the support of downloadable set-up software.
- Easy integration with receiving controllers and loggers via a range of output protocols, and single combined data output.
- High levels of environmental protection and easy maintenance provided by stainless steel construction and field replaceable sensors.



MetConnect One
compact model
with integrated wind sensor



MetConnect connectors
allow expansion and
provide high IP rating

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WIND SPEED	
Range	0-60m/s (134 mph)
Accuracy	12m/s +/-2% RMS
Resolution	0.01m/s
Starting threshold	0.01m/s
Units of measurement	m/s, knots, mph, kph, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	12m/s +/- 3°
Resolution	1°
Starting threshold	0.01m/s
Units of measurement	degrees

AIR TEMPERATURE	
Range	-35°C TO +70°C
Accuracy	0.2°C (-35°C to +70°C)
Resolution	0.1°C
Units of measurement	°C, °F

RELATIVE HUMIDITY	
Range	0-100%RH
Accuracy	1.5% RH @ 25°C (0-80%RH) Typical 2% (-35°C to 70°C, 0-100%RH)
Resolution	1% RH
Units of measurement	% RH

BAROMETRIC PRESSURE	
Range	300-1100 hPa
Accuracy	+/- 0.5 hPa @ 0 to 50°C
Resolution	0.1 hPa
Units of measurement	hPa, mbar, mmHg, inHg

ADDITIONAL INPUTS	
Contact closure	For tipping bucket rain gauge
Pt100 Temp probe	4 wire Pt100 conforms to IEC 60751
Analogue 1	0-5V or 4-20mA loop or self powered
Analogue 2	0-5V or 4-20mA loop or self powered

Note: 5V power is available on additional sensor input connectors

OUTPUTS	
Digital comms modes	RS232, RS422, RS485 (2 wire pt to pt), MODBUS, SDI-12
Protocols	ASCII, MODBUS (RTU and ASCII), NMEA0183, SDI-12 v1.3
Data output rates	1 measurement per second 1 measurement per 2 seconds 1 measurement per 4 seconds polled

POWER SUPPLY	
Input voltage	5-30V DC
Current @ 12V DC	<70mA @ 12Vdc

CONNECTIVITY	
Connectors	M12 8-way connectors on all inputs and outputs

MECHANICAL	
Bracket and Hub Box	Stainless steel 316 construction
Anemometer	UV Stabilised polycarbonate construction
Installation Fittings	Fit to 30mm to 58mm pole or mast
Weight	3.0 kg

ENVIRONMENTAL & REGULATORY	
Protection class	Hub Box and Pressure Sensor: IP66 & IP67 Temperature & Humidity Sensor: IP66 Wind Sensor: IP66
EMC	EN61326:2013
Operating temp.	-35°C to +70°C
Storage temp	-40°C to +70°C
Regional markings	CE, UKCA, FCC Part 15
RoHS compliant	Yes
Origin	UK (United Kingdom)

WARRANTY	
Warranty	12 months

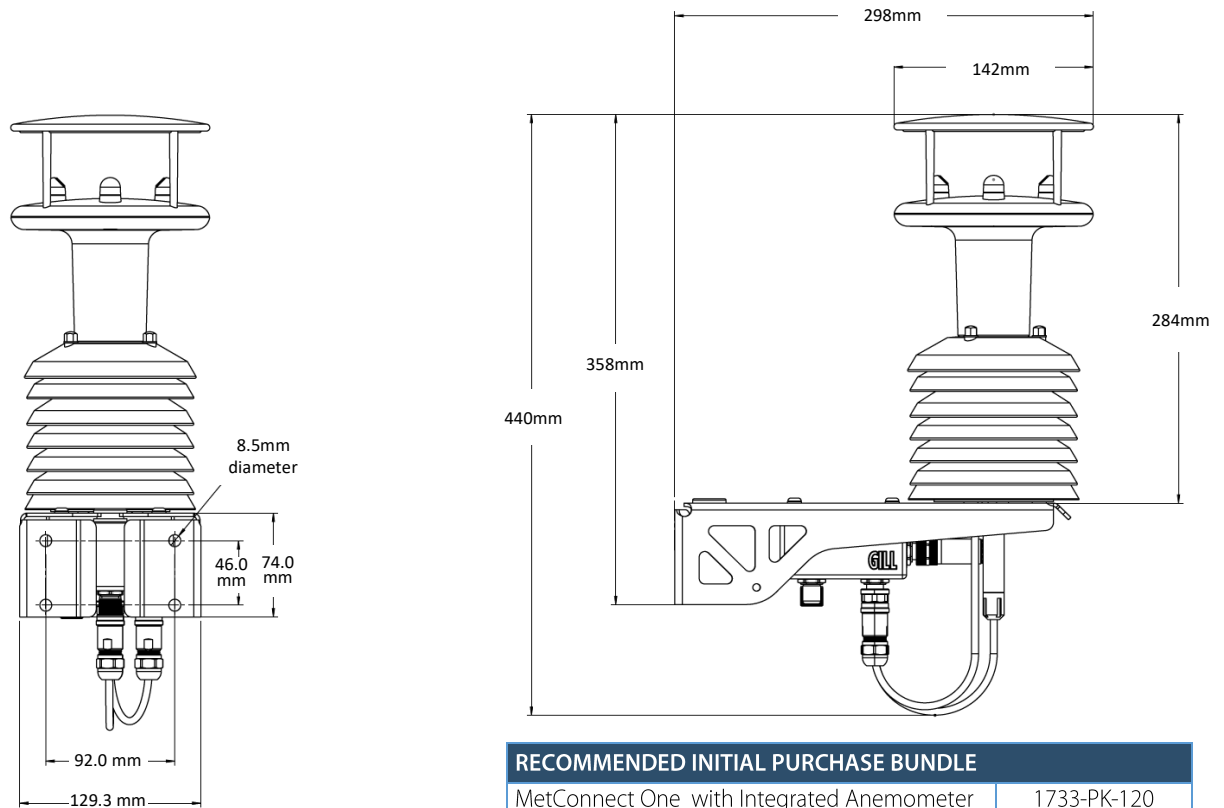
SOFTWARE	
MetSet	Downloadable, free of charge software to set-up MetConnect products
MetView	Downloadable, free of charge software to display and log the measurement data produced by MetConnect products

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METCONNECT PART NUMBERS & RANGE

MetConnect THP (Temperature, Humidity & Pressure)	1733-PK-110
MetConnect One with Integrated Anemometer	1733-PK-120

RECOMMENDED INITIAL PURCHASE BUNDLE

MetConnect One with Integrated Anemometer	1733-PK-120
Converter, M12 to USB for configuring MetConnect	1733-PK-030
Cable, power & communications cable, 10m with fitted M12 connector at MetConnect end	1733-PK-013
MetConnect User Manual* MetSet Software* to configure MetConnect MetView Software*, to view reported parameters	* download from Gill Instruments website

ACCESSORIES

Connector, M12, 8 way, field wireable	1733-PK-002
Cable, 4 pair for power & communications cable, supplied per metre	1733-PK-010
Cable, power & communications cable, 2m with fitted M12 connector at MetConnect end	1733-PK-011
Cable, power & communications cable, 10m with fitted M12 connector at MetConnect end	1733-PK-013
Cable, power & communications cable, 20m with fitted M12 connector at MetConnect end	1733-PK-014
Bracket mounting kit, replacement for re-mounting MetConnect	1733-PK-022
Converter, M12 to USB for configuring MetConnect	1733-PK-030
Sensor, replacement pressure sensor	1733-PK-040
Sensor, replacement temperature & humidity sensor	1733-PK-041
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For more information about the MetConnect range please contact Gill Instruments.

Designed and manufactured by Gill Instruments Limited in the U.K.

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