

P4-100

Main features

- Measures over 20 parameters
- Archive over 500 days of data
- GPRS/2G/3G/4G/WiFi/RS-232/Fiber/Ethernet
- Robust against harsh weather conditions
- Compliant with WMO/ICAO recommendations



P4-100 features the latest technology developed by PULSONIC and follows WMO and ICAO recommendations.

P4-100 can be used for different applications such as:

- Synoptic observation (with or without wi-fi local connection to the local observer's office)
- Climatological observation
- Rainfall monitoring,
- Agrometeorology,
- Hydrology (river levels...)

Automatic

P4-100 automatically records weather data and communicates it to a data concentrator without any human intervention.

Robust

Equipped with watertight connectors, made up of cast aluminum casing and dehydrated, **P4-100** resists severe climatic conditions (high humidity, high heat, presence of sand or insects...)

Autonomous

Equipped with the latest technology, **P4-100** consumes very little energy and can be powered by a very small solar panel.

Easy to install

To facilitate installation, **P4-100** is delivered pre-programmed and comes equipped with a keyboard and display.

General

Enclosure

Material	Cast Aluminium
Dimensions	125,5x127,5x60 mm
Weight	1kg
Keyboard	5 keys, waterproof
Integrated display	
Display capacity	32 digits
Technology	LCD

Environment

Operating temperature	-20°C to 70°C
Storage temperature	-25°C to 70°C
Moisture	Up to 100%
IP Class	IP66
Waterproof connectors	
Analog / Rainfall	Binder M12 IP67
COM1/COM2/SDI-12	SUB-D 9 IP67
LAN	Binder M5 IP67
Solar panel	SwitchCraft jack 5.5mm IP67
Battery	Binder M8 IP67

Desiccant plug

Product code: 003334

Absorption power	1/40 UD (2,5g)
Dimensions	35 x ø34 mm
Average duration of use	1 year

Data transfer (depending on the options chosen)

Connectivity (depending on the options chosen)

Wifi	Available
GPRS 2G (item 003018/003084)	Available
GSM 2G, 3G (item 003283/003289)	850/900/1800/1900/2100 MHz
GSM 2G, 3G, 4G (item 003391/003330)	700/800/900/1800/2100/2600 MHz
RS-232	Available
RTC	Available
Ethernet	Available
Fiber	Available
USB	Available
µSD card	2Go

Power supply

Current	8mA
Power voltage	6 to 9V
Internal battery	
Technology	Lithium
Lifetime	>10 years
External battery*	
NiMh	6V 6Ah
Pb	6V 12Ah

*The technology of the external battery depends on the outdoor temperature range. By this study, the life of the battery is optimised.

Storage

Internal memory (rotating)	~6 mois
External memory (optional µsd card reader)	2Go (~500 days of data)

Watchdog

Hardware Watchdog / Supervision of proper functioning (software watchdog)

Resolution

ADC	24 Bit
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Internal clock

High precision quartz, corrected for temperature drift
Daily time setting by remote server



Communication frequency

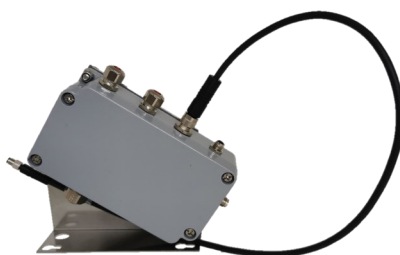
Adjustable from 1 minute to 1 time per day

Expansion modules to extend the number of inputs

CIBUS LAN waterproof module

Product code: 003403

Material	Cast aluminium
Dimensions	118x134x36mm
Weight	415g
Operating T°C	-20 to +70°C
Storage T°C	-25 to +70°C
Moisture	0% to 100%
Class IP	IP66



Available inputs

CIBUS sensor input	1
Digital input LAN	2
LAN for connection to the P4-100	1
Power input if P4-100 on mains	1
Secondary channel broadcasting	1

Multifunction Module

Product code: 000028

Material	Cast aluminium
Dimensions	185x80x35mm
Weight	450g
Operating T°C	-20 to +70°C
Storage T°C	-25 to +70°C
Moisture	0% to 100%
Class IP	IP66



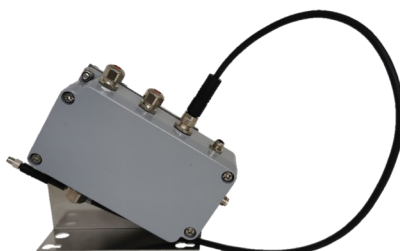
Available inputs

Analog input	3
Digital input LAN	2
LAN for connection to the P4-100	1

LAN Hub Module

Product code: 002319

Material	Cast aluminium
Dimensions	118x134x36mm
Weight	415g
Operating T°C	-20 to +70°C
Storage T°C	-25 to +70°C
Moisture	0% to 100%
Class IP	IP66



Available inputs

Digital input LAN	3
LAN for connection to the P4-100	1

SDI-12 Hub

Product code: 002917

Material	Cast aluminium
Dimensions	125.5x127.5x60mm
Weight	450g
Operating T°C	-20 to +70°C
Storage T°C	-25 to +70°C
Moisture	0% to 100%
Class IP	IP66



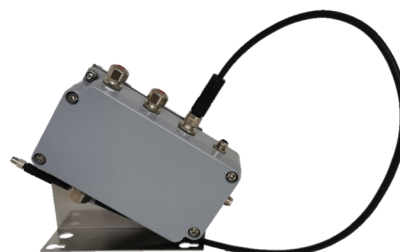
Available inputs

SDI12 input (male)	1
SDI12 input (female)	2

LAN-RS485 Module

Product code: 003266

Material	Cast aluminium
Dimensions	118x134x36mm
Weight	415g
Operating T°C	-20 to +70°C
Storage T°C	-25 to +70°C
Moisture	0% to 100%
Class IP	IP66



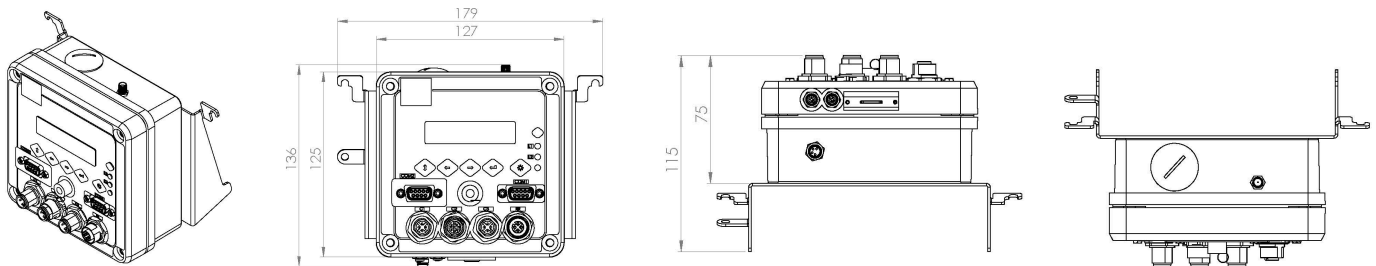
Available inputs

RS485 input	1
Digital input LAN	2
LAN for connection to the P4-100	1

P4-100 variations

	Product code: 003018	Product code: 003391	Product code: 003084	Product code: 003330
«Pulse» input	1	1	1	1
Analog input	1	3	1	3
COM port (maintenance)	1	1	1	1
Digital sensor network	2	2	2	2
Solar panel input	1	1	1	1
Battery input	1	1	1	1
Communication	GPRS 2G	GPRS 2G	GPRS 2G 3G 4G	GPRS 2G 3G 4G

Dimensions



Technical support

Maintenance

Maintenance log that can be viewed locally and sent to the server. External indicator of humidity in the central unit.

12 months warranty

PULSONIC can provide assistance and support for at least 2 years for the maintenance of the remote computer system

CE Mark Compliance



Complies with the relevant EU harmonisation legislation:

- Directive 2014/30/EU: Electromagnetic Compatibility (EMC)
- Directive 2014/53/EU: Radio equipment
- Directive 2011/65/EU: Restriction of certain hazardous substances in electrical and electronic equipment (RoHS 2)

Compliance with the requirements has been demonstrated against the following standards:

EN 61326-1:2013 / EN 301489-1 V2.2.0:2017 / EN 301 489-52 V1.1.0:2016 / EN 62479:2010 / EN 301 511 V12.531 (2017-03) / TS 151 010-1 V13.2.0 (2016-12) / ERC/REC 70-03 (2017)

The conformity assessment procedures referred to in Directives 2014/30/EU and 2014/53/EU have been followed in collaboration with the following notified body: EMITECH, ZA de l'Observatoire, 3 Avenue des Coudriers, 78180 Montigny-le-Bretonneux



WWW.PULSONIC.COM

PULSONIC

48, rue de Versailles 91400 Orsay France
 Tel : +33 1 64 46 34 10 | Fax : +33 1 64 46 25 22
 Email : info@pulsonic.com | www.pulsonic.com
 SAS with a capital of 70000€ | RCS : Evry B 329 221 980

