



Bluetooth communication enabler

4512

- Bluetooth communication between the PR 4000 and 9000 devices and iOS/Android devices
- Live monitoring of process values and diagnostics on compatible smart devices or directly on the PR 4512
- Advanced data logging and event logging using the built-in real-time clock



Applications

- Program devices via Bluetooth using an iOS/Android device running the free PPS app (PR Process Supervisor).
- Use PPS data for preventive maintenance.
- All logged data can be exported in .csv format, for advanced data analysis off-site.
- On-site analysis of real-time process data on an iOS/Android compatible device.
- Off-site analysis of historic process data on a PC using PReset.

Technical characteristics

- PR 4512 runs Bluetooth 4.2, and requires a smart device with 4.0 or newer.
- PPS is compatible with iOS and Android devices.
- The PR 4512 automatically detects the device setting on the connected PR 4000 and 9000 device.
- An internal battery energizes the 4512 real-time clock for at least 2 years, should the 4512 remain de-energized.
- Typical data logging capacity is more than 30 days at 1 second intervals.
- Easy to read dot matrix LCD display.
- Fast pairing or safe pairing via two-factor authentication.

Mounting / installation / programming

- Mounting in Zone 2 / Div. 2.
- The 4512 can be moved from one device to another. The individual system 4000/9000 device configuration of a transmitter can be saved and downloaded to subsequent transmitters.
- Programmed parameters can be protected by a user-defined password.
- When mounted on devices that are installed upside down, a menu selection rotates the 4512 display 180 degrees and reverses the up/down button functions.
- All data, including configuration, data log and event log from a PR 4000 / 9000 device can be transferred to a PC using the PR 4590.
- Please find an updated list of countries who have approved the use of 4512 at: www.prelectronics.com/4512-bluetooth-approvals/

Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

For pricing or any further information, please contact Omni Instruments Ltd.

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Order

Type	Description
4512	Bluetooth communication enabler
4590	ConfigMate Interface

Environmental Conditions

Operating temperature.....	-20°C to +60°C
Storage temperature.....	-20°C to +85°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree.....	IP20 when installed
Installation in.....	Pollution degree 2 & meas. / overvoltage cat. II

Mechanical specifications

Dimensions (HxWxD).....	73.2 x 23.3 x 26.5 mm
Dimensions (HxWxD) w/ 4000/9000 unit.....	109 x 23.5 x 131 mm
Weight approx.....	30 g

Common specifications

Supply

Supply voltage.....	6.5...20 V supplied from host 4000 / 9000 device
Max. required power.....	≤ 0.15 W

Data logging

Memory.....	100 MB
Capacity.....	> 2.75 million data points (depending on the connected PR device)
Data retention, without power.....	~ 10 years

Extended EMC immunity: NAMUR

NE21, A criterion, burst.....	No loss of communication
Internal battery back-up (for real-time clock).....	2 years (@ 25°C)
Calibrated clock accuracy.....	<±60 s/year @ 25°C
Bluetooth communication.....	BLE 4.2
Bluetooth radio.....	Class 2

Observed authority requirements

Directives

EMC.....	2014/30/EU
ATEX.....	2014/34/EU
RED.....	2014/53/EU
RoHS.....	2011/65/EU

Bluetooth

Europe, CE.....	117-37823-1
USA, FCC.....	ID QoQBGM111
Canada, IC.....	5123A-BGM111
Japan, MIC.....	R 209-J00192
Korea, KC.....	MSIP-CRM-BG, BGM111
China, SRRC.....	2018DJ6574
Australia, RCM.....	42 004 182 772
Brazil, Anatel.....	06541-18-11723

Standards

UL, Standard for Safety.....	UL 61010-1
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Approvals

ATEX.....	DEKRA 13ATEX0098 X
IECEX.....	DEK 13.0026 X
c FM us.....	FM18US0268X / FM18CA0129X

I.S. / Ex marking

ATEX.....	II 3 G Ex nA IIC T5 G
IECEX.....	Ex nA IIC T5 Gc
FM, US.....	CL I, Div 2, Gp A, B, C, D T5; CL I, Zn 2, Gp IIC T5
FM, CA.....	CL I, Div 2, Gp A, B, C, D T5

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