PERFORMANCE MADE SMARTER

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/

Order

Type	Description
4512 4590	Bluetooth communication enabler 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
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

I.S. / Ex marking

ATEX	II 3 G Ex ec IIC T5
IECEx	Ex ec IIC T5 Gc
FM, US	Cl I, Div 2, Gp A, B, C, D T5; Cl I, Zn 2, Grp IIC T5
FM, CA	Cl I, Div 2, Gp A, B, C, D T5

Observed authority requirements

Directives

EMC	2014/30/EU & UK SI 2016/1091
ATEX	2014/34/EU & UK SI 2016/1107
RED	2014/53/EU & UK SI 2017/1206
RoHS	2011/65/EU & UK SI 2012/3032

Standards

Standard for Safety	ANSI/ISA 61010-1 : 2004

Bluetooth

Europe, CE	117-37823-1
USA, FCC	ID QoQBGM111
Canada, IC	5123A-BGM111
China, SRRC	2018DJ6574
Australia, RCM	42 004 182 772
Brazil, Anatel	06541-18-11723
Japan, MIC	R 209-J00192
Korea, KC	MSIP-CRM-BGT, BGM111
Malaysia, SIRIM QAS	RAHY/63M/1020/S(20-4544)
Singapore, IMDA	N1861-20
EAC	TR-CU 020/2011

Approvals

ATEX	DEKRA 13ATEX0098 X
IECEx	DEK 13.0026 X
UKEX	DEKRA 21UKEX0167X
c FM us	FM18US0268X / FM18CA0129X