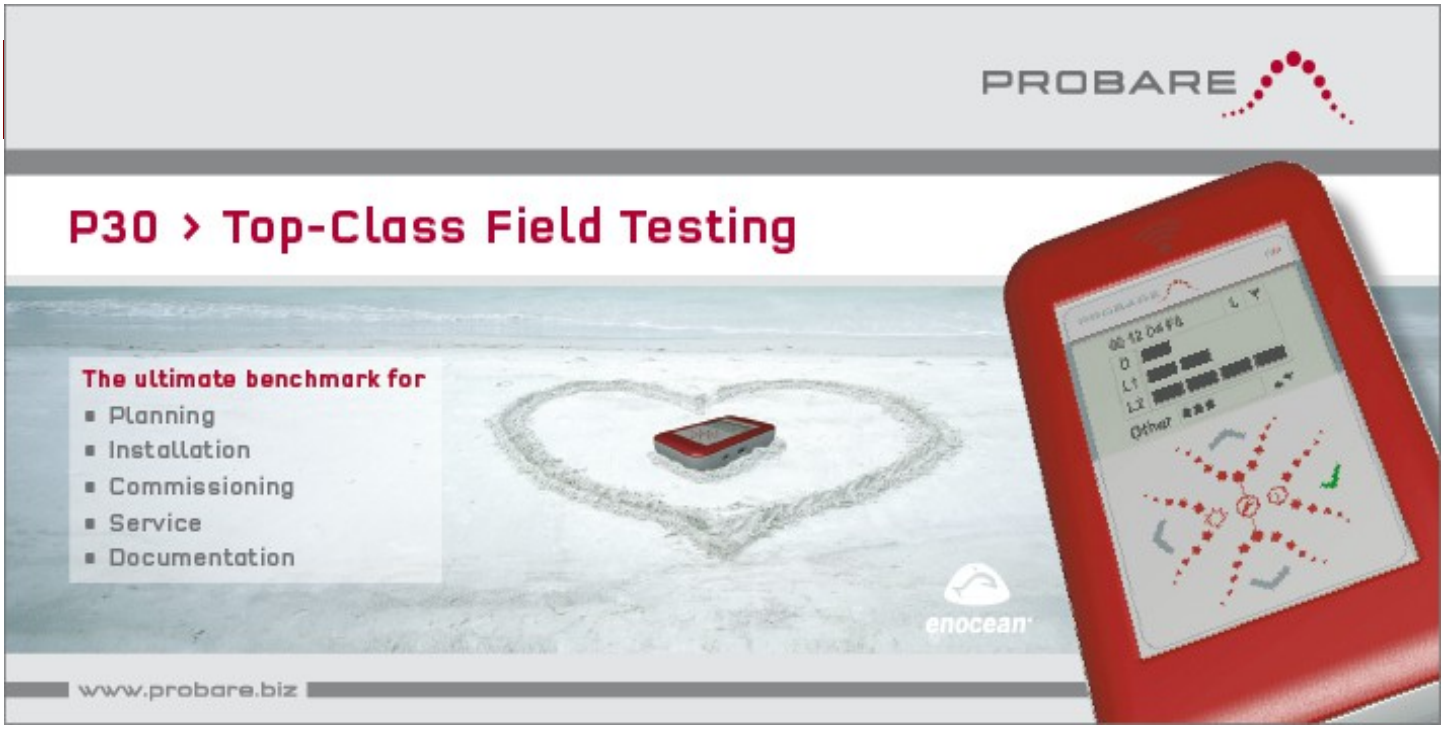


USER MANUAL

| Short Form |

FIELD TEST TOOL FOR EnOcean©

REFERENCE TOOL FOR

PLANNING – INSTALLATION – COMMISSIONING

SERVICE – DOCUMENTATION

EnOcean© PLATFORM

- DOLPHIN SUPPORT
- ALL TELEGRAM TYPES
- REMOTE MANAGEMENT
- SMART ACKNOWLEDGE
- ENCRYPTION

DAY TO DAY USE

- RELIABLE DOCUMENTATION
- INTUITIVE OPERATION
- SMALL AND HANDY
- LIGHTWEIGHT AND ROBUST
- UPDATE ABLE

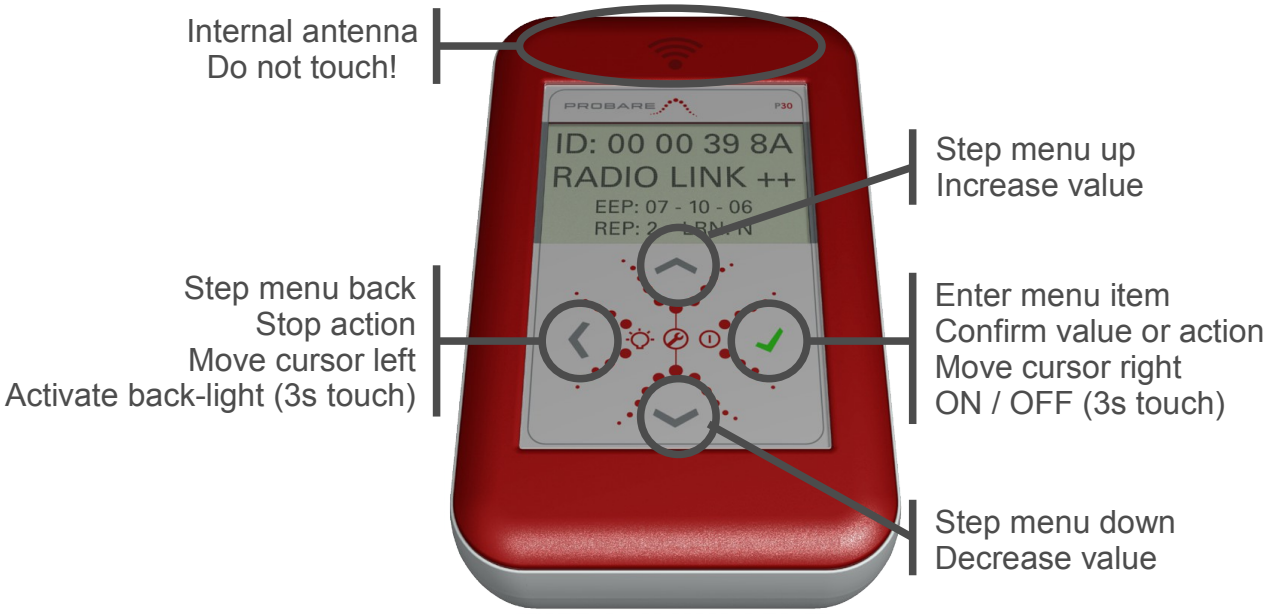
Register your P30 today.
You will receive firmware updates free of charge.
www.probare.at/myP30

P30 QUICK START

(1) Check scope of delivery according to section technical data on page 7.
(2) Insert two new dry cells or charged batteries into battery compartment; check polarity carefully!
(3) Switch on P30 by touching the ON / OFF touch-button for more than 3s.
(4) Boot screen is shown followed by the P30 main menu; now the unit is ready for use.

P30 documentation may also be found on the USB memory stick that is shipped with the unit!

REMARK
The four P30 buttons are state of the art touch-type buttons that respond to finger tips. No manual pressure is required to activate them.



The P30 main menu is built from five menu items that correspond with the five typical use cases during planning, installation, commissioning and service of EnOcean© networks.

Menu	Use Cases	Areas of Application	Documentation
Radio Network	Radio link reliability at a glance	Planning, installation, commissioning, service	USB memory
Repeater	Repeater operation to optimize positioning	Planning, installation, commissioning, service	USB memory
Radio Link Test	Quality of a radio link between point A and B	Planning, commissioning, service	USB memory
Remote Management	Configuration without physical access	Commissioning, service	
PRO>ID Toolbox	Analysis of data stored on USB memory	Commissioning, service	

SETUP OF P30

When putting a P30 into operation for the first time or in case of discontinued supply of power in between individual operations it is advised to set time and date of the built in real time clock. This secures correct time stamping in the P30 log files. Please note that retrospective corrections of log files are not possible. Further, menu language and display contrast may be set by the user at any time.

To set up a P30, please follow the steps below:

(1) Enter **| Main Menu |** of P30 by touching ◄ button repeatedly

(2) Enter **| Setup |** menu by touching ▲ und ▼ buttons simultaneously for 3s

(3) Set correct date in sub-menu **| Date/Time | Date |**

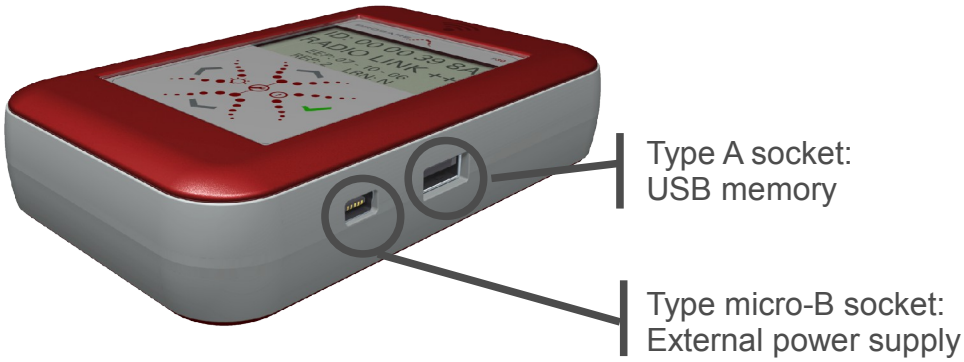
(4) Set correct time in sub-menu **| Date/Time | Time |**

(5) Change menu language in sub-menu **| P30 Setup |**

(6) Adjust LC display contrast in sub-menu **| P30 Setup | Display Contrast |**

(7) Exit **| Setup |** menu by touching ◄ repeatedly

USB CONNECTIVITY
EXTERNAL POWER SUPPLY



Switch over from internal to external power supply can be done by simply plugging in a USB cable connected to an external power source. This does not cause any operational interruption and is very helpful in case data logging to a USB memory needs to be extended to a much longer time frame, such as for documentation purposes.

REMARKS

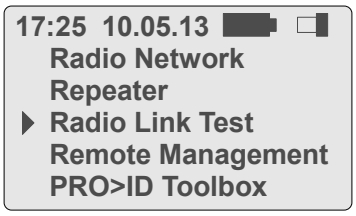
Connect the P30 to a USB port that is compliant to the USB specification and that is able to deliver 500mA of supply current. Other USB ports or USB hubs may cause problems with power supply handling.
Batteries inserted in the battery compartment of a P30 are not charged from an external power supply connected to the device.

SECURITY ADVICE

To externally power a P30 use the USB interface of a computer, the power supply shipped with the P30 or the supply that is available as an accessory. Please note that usage of other external power sources may cause severe damage to the unit itself as well as it may cause personal injury to the user of a P30, which both explicitly is excluded from any warranty and / or product liability.

P30 OPERATION

P30 MAIN MENU



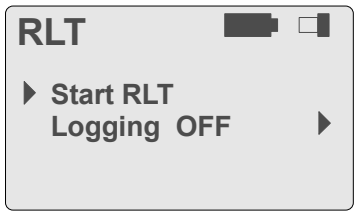
17:25 10.05.13 Time and date

Dry cell / battery capacity 100%
Dry cell / battery to be replaced
(shown only with internal supply)

USB memory inserted,
read / write access working

Cursor set to menu item,
enter sub menu by touching ✓

P30 SUB MENU / LEVEL 1



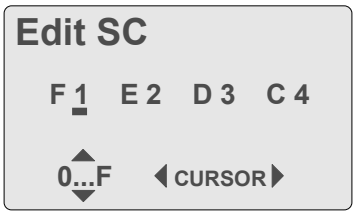
Name of the selected sub-menu is shown in the upper left corner:

	RNA	Radio Network Analysis
	RPP	Repeater / Postmaster
RLT	RLT	Radio Link Test
	RMR	Remote Management Radio
	PRO>ID	PRO>ID Toolbox

Logging OFF

Selection menu, indicated by the ▶ symbol shown right hand of a menu entry

P30 PARAMETER EDITING



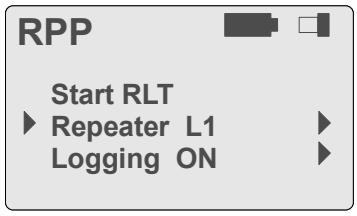
Parameters are edited by incrementing or decrementing of individual digits. Input ranges are limited to reasonable values.

Example: Security Code (SC)

CURSOR Select digit to be edited by using the buttons ◀ ✓

0...F Increment / decrement value of selected digit by using the buttons ▲ ▼

P30 SELECTION MENU



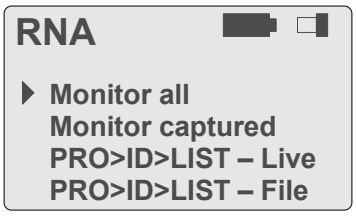
A Selection Menu toggles all possible states when button ✓ is touched repeatedly.

Example: Configuration of Repeater

Repeater L1
Repeater L2

P30 RNA MODE

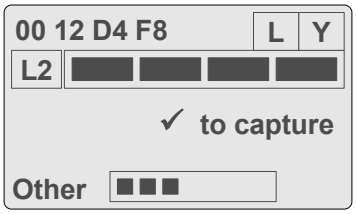
RADIO NETZWERK ANALYSIS – RNA



The Radio Network Analysis mode gives precise information about the radio link quality and the radio paths available in an EnOcean© installation.
Monitoring of all radio communication is possible as well as setting a filter on an individual EnOcean© ID.

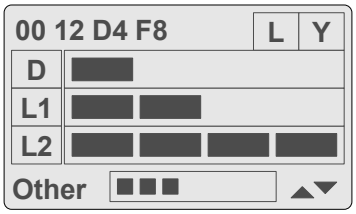
| Monitor all | is used to monitor all EnOcean© based radio communication. The P30 display shows the EnOcean© ID received (top left), as well as the radio link quality on the most reliable radio path available.
The information displayed is shown for about 250ms per message. Then, the display either is cleared or it is refreshed with information from a subsequent message.

RNA – Monitor all



Touching the button ✓ captures an ID and sets a filter on it. In parallel the P30 changes to **| Monitor captured |**. Now, the display indicates all possible radio paths and shows the radio link quality received per each of them. At a glance a P30 user discovers whether repeaters are in operation and how the radio paths differ in their radio link quality. The display content will not be cleared but it will be updated with the latest information from the same EnOcean© ID.

RNA – Monitor captured



Non EnOcean© radio signals on the same radio channel are indicated by the **Other** bar graph.

| PRO>ID>LIST – Live | stores up to 72 messages and allows for in detailed analysis right on the P30.

| PRO>ID>LIST – File | is used to store all radio channel activities on a USB memory stick.

INDICATION OF RADIO LINK QUALITY AND RADIO PATHS PER EACH EnOcean© MESSAGE

Excellent radio link quality, distance below 5m	D Direct radio link
Very good radio link quality, permanently reliable operation at high signal margin	L1 Repeater level 1
	L2 Repeater level 2
Good radio link quality, permanently reliable operation with sufficient signal margin	L Teach-in telegram
Low radio link quality, no permanently reliable operation with in wall mount devices possible	Y EnOcean© signal receive indicator
Other — Field strength of non EnOcean© applications	▲▼ Additional results / details available, scroll up / down

P30 TECHNICAL DATA

RADIO	P30 315MHz	P30 868MHz
Frequency	315.0MHz	868.3MHz
Type Approval	FCC / IC CFR-47 Part 15	R&TTE EN 300 220
Radio Standard	EnOcean© 315MHz ERP1	EnOcean© 868MHz ERP1
Modulation	ASK 125kbps	
Sensitivity	-93dBm (typ.)	
Transmitter Level	< 75.6dbµV/m (d=3m)	+5dBm ERP
Antenna	Helix, integrated	Monopole, integrated
Receiver Level	-94dBm … -45dBm, 1dB Resolution	
Transmitter Operation	Repeater, Postmaster, Radio Link Test, Remote Management	
Platform	DOLPHIN 315MHz	DOLPHIN 868MHz

TEST CASES	P30 315MHz	P30 868MHz
EnOcean© Telegrams	Signal quality direct link / repeater level 1 / repeater level 2 Any type of DOLPHIN telegram Sub telegram count Payload data Time stamp Support of encrypted and non-encrypted communication	
EnOcean© Sub Telegrams	Signal level direct link / repeater level 1 / repeater level 2 Timing sub telegrams direct link / repeater level 1 / repeater level 2 Integrity of payload	
Signals from other Frequency Users	Signal level Duration of frequency occupation >15ms signal capturing time	
Repeater	Repeater level 1 / level 2 configurable	
Radio Link Test	EEP 07-3F-00: master / slave with temporary pairing Optionally fixed pairing of two P30 with optimized feature set	
Remote Management	According to specification “EnOcean Remote Management” Remote Learn, Remote Flash Read	

PROBARE

P30 TECHNICAL DATA

OPERATION	P30 315MHz	P30 868MHz
Menu Language	English (German via Setup Menu)	
Key Pad	4 touch buttons, water and dust proof	
Display	Monochromatic 5.2cm graphic display,sun light readable switchable LED back light	
Real Time Clock	Time and date with back-up, 1ms time stamp resolution	
Documentation	EnOcean© telegrams plus frequency usage by other users P30 log files secured against manipulation Capacity >365 days on a 1GB USB memory	
Analysis	Conversion tool P30 → CSV / XML, runs from USB Stick (.NET 3.5) XML format suited for DolphinView© of EnOcean GmbH	
Power Supply	2 dry cells or batteries, AA type (LR06 1,5V / 1,25V) USB power supply / USB interface of a computers (500mA)	
Operating Time	Dry cells: about 14 hours of radio network analysis, w/o back light External power supply: 100% duty cycle	
USB 2.0 (Full Speed)	Type A socket: logging onto USB memory, up to 4GB Type micro-B socket: power supply	
Software Update	Via USB memory, no PC tool required	

GENERAL	P30 315MHz	P30 868MHz
Size	118mm x 75mm x 28mm (H x W x D)	
Weight	145g w/o batteries, about 210g including batteries	
Operating Conditions	0°C … 45°C 10%rH … 95%rH (non condensing)	
Storage Conditions	-15°C … +65°C 10%rH … 98%rH (non condensing)	
Marking	FCC-ID / IC-ID	CE
Scope of Supply	P30 315MHz USB stick, USB cable Quick Start Guide DE / EN	P30 868MHz USB stick, USB cable Power Supply, Euro Plug Quick Start Guide DE / EN
Order Number	1205005101R	1205005001R

WEEE Directive 2002/96/EC: Waste Electric and Electronic Equipment

Waste electric and electronic equipment requires professional recycling and by no means it may be disposed to non-recyclable waste.
As the P30 is a B2B product it is sold to business users only and, if not otherwise agreed upon with ViCOS, at the end of the P30 life cycle such business users have to take care for a professional recycling conforming to applicable laws.
GERMANY only: According to “Elektro und Elektronikgeräte Gesetz (ElektroG)” the return of a P30 to any public recycling center is not allowed.

P30 868MHz: CE Conformity

(AN 1000107)

Radio type approval and EMC according to R&TTE Directive 1999/5/EC.
Electronics compliant to RoHS Directive 2002/95/EC.

P30 315MHz: Contains FCC ID: SZV-STM300C

(AN 1000106)

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.
Contains IC: 5731A-STM300C.

POINT OF CONTACT

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