



Mobile remote meter reading system

The new generation of Izar radio devices is devoted to mobile remote meter reading. The radios operate under Prios protocol at a frequency of 868.95 MHz. They are compatible with Sappel modular meters (Izar CP) and meters with reed dry contact pulse emitters or emitters of the NPN open collector or L-bus type (Izar DP). The Izar radio units are easy to fit and are field programmable with the identification number of the associated meter.

Izar CP and Izar DP radio modules transmit the meter reading via a unidirectional radio link to a Psion handheld computer equipped with an Izar PRT receiver.

Izar radio modules offer a number of functions (index at anniversary date, battery life etc.) and alarms (leaks, meter blocked, reverse water flow etc.).

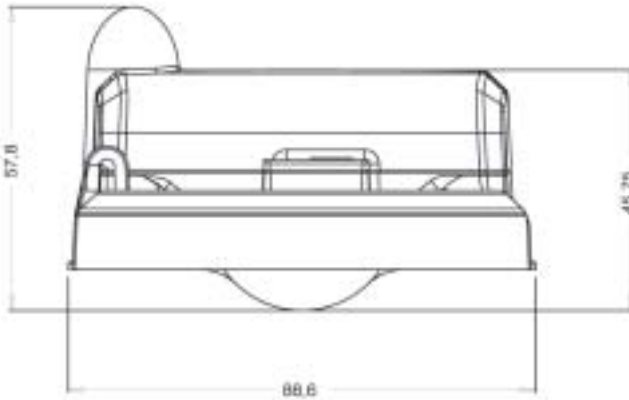
Two fixed batteries enable independent operation for approximately 15 years of standard use.





izar^{CP}

Dimensions



Compatibility **izar**^{CP}

Meters	Sappel modular range Pulse weight ND 15 - 40 mm: 1 litre Pulse weight ND 50 - 125 mm : 10 litres Pulse weight ND 150 - 200 mm : 100 litres
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Principle

Izar® CP/DP includes an electronic circuit that picks up the data sent by a pulse emitter and stores it in a memory. Izar®CP/DP transmits the index and other operating information every eight seconds (mobile mode).

The Psion PRT* handheld computer is first loaded with the reading round data. It collects the reading information and directly transfers it to the central computer system.

(*) The Izar® system is compatible with other handheld computers as well. Please contact us.

Technical characteristics

Radio specifications

Communication protocol	
Frequency	
Modulation	
Power	
Transmission	
Range	Up
Compliant with the standard	
Approved	

Power supply

Battery	
Typical Life	




* standard conditions of use and temperature
Theoretical life, with no guarantee. See NT 065.
For Izar DP: sensor with average consumption of 2 uA

Environment

Operating temperature range	
Storage temperature range	
Ambient humidity	
Degree of protection	
Intrinsic safety	

Programming

Optical interface	
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PRIOS 
868,95 MHz
FSK
7 mW
Unidirectional
to 350 m depending on the environment
EN 300 220
  RTTE

2 x Lithium 3.6 V fixed
15 years*

A or less

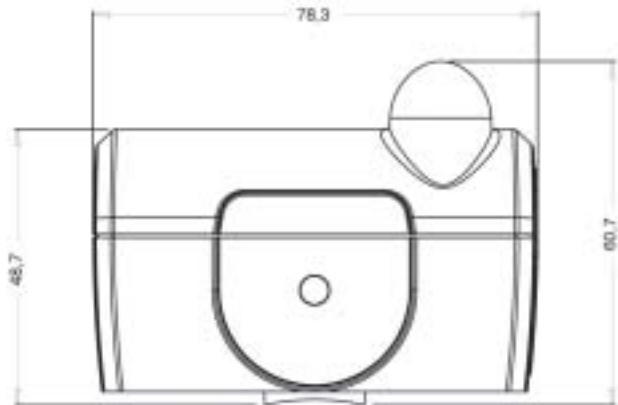
-15°C to + 55°C
-20°C to +55°C
0 to 100%
IP 685
under way

IrDA



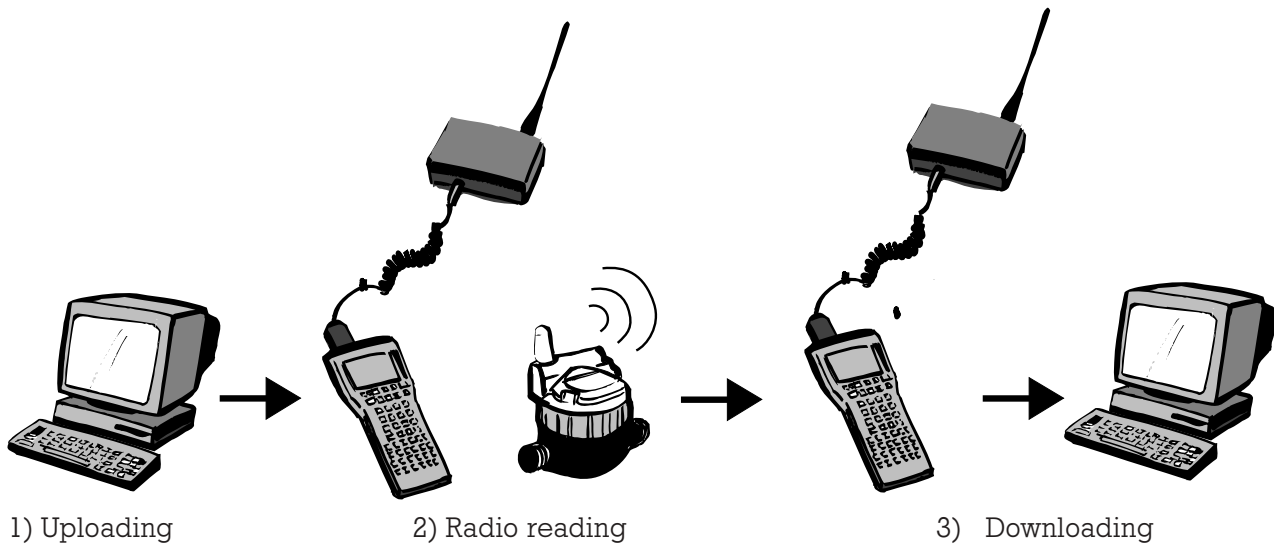
izar[®] DP

Dimensions



Compatibility *izar*[®] DP

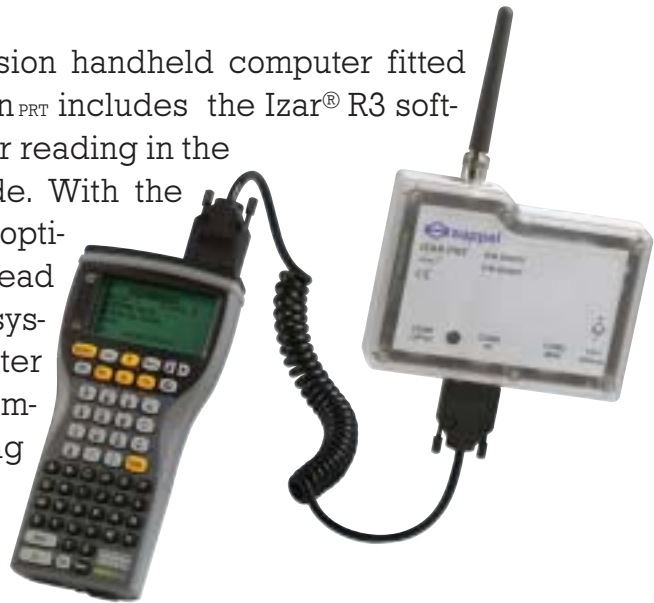
Pulse emitter	Reed dry contact type emitter or NPN open-collector or L-BUS type emitters
Meters	Sappel modular range and all types of meters (liquid, gas, electricity and heating) fitted with dry contact or open-collector or L-Bus type pulse transmitters
Length of the IzarDP cable	2 meters



PSION PRT

Handheld computer and radio receiver **izar**[®] PRT

The Psion PRT system includes a Psion handheld computer fitted with an Izar PRT radio receiver. Psion PRT includes the Izar[®] R3 software developed by Sappel for meter reading in the radio mode or in the manual mode. With the Izar PRT radio receiver and the IrDA optical head, it can programme and read all meters fitted with an Izar radio system. The Psion handheld computer communicates with all PC type computers for loading and unloading data.



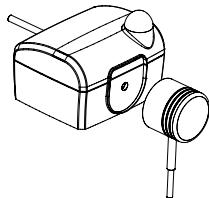
Technical characteristics **izar**[®] PRT

Frequency	868,95 MHz
Operating temperature range	-15 °C to + 50°C
Storage temperature range	-15 °C to + 70°C
Protection	IP 43
Power supply	Rechargeable battery with a life of two days (2 x 8 hours) of operation
Interfaces	Serial port for handheld computer Serial port for Izar MRP Serial port for IrDA optical head

Technical characteristics PSION

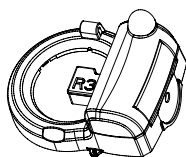
Microprocessor	NEC V30 MX 16 bits
Clocking speed	27,684 MHz
ROM memory	2 Mo
Internal RAM memory	2 Mo
Memory extension	Removable flash memory of 256 Kb or 2 Mb
Display	LCD screen, 39 characters on 12 lines, back-lit
Power supply	Rechargeable batteries or 2 alkaline AA batteries or mains supply
Data back-up	Replaceable lithium battery
Communication port	Built-in communication interface for connection to a base or an RS 232 connector
Operating temperature	-20°C to 60°C
Storage temperature	-25°C to 70°C
Electromagnetic compatibility	Conform to European directives relatives to electromagnetic compatibility CE

THE PRINCIPLE OF *izar*[®]

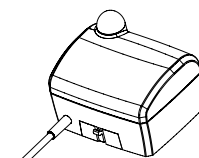


Radio module programming with the IrDA optical head connected to Izar[®] PRT

izar[®] CP



izar[®] DP



Sends the current meter index at regular intervals.



izar[®] PRT

Psion PRT

PSION MX

Psion R3 Izar software
Standard, semiautomatic and automatic reading modes

uploading and downloading



Operating PC software
PC interface Izar software
PC operating Izar software

izar[®] radio functions

- Actual meter index
- Index on anniversary date (e.g. Dec. 31)
- Remaining battery life
- Leak detection
- Meter stopped
- Mechanical fraud alarm (removal of Izar CP or cable cut-off for Izar DP)
- Magnetic fraud alarm (Izar CP)
- Reverse water flow alarm (Izar CP, Izar DP*)
- Overflow alarm
- Underflow alarm

*only if the sensor used delivers the information

izar[®] SOFTWARE

PSION R3 izar[®] SOFTWARE



The Izar Psion R3 software is integrated into the flash card of the Psion handheld computer and is particularly user-friendly and suited to all types of reading.

Main characteristics :

- Communication with a PC
- Izar radio device programming
- Manual and radio reading (combined rounds)
- Compatible with Izar R1, R2 and R3 radio devices
- Three reading modes:
 - Detailed
 - Semiautomatic
 - Automatic
- Multi-energy: water, gas, heating etc.

PC SOFTWARE

PC Interface Izar software



This software is used to interface the Izar radio reading system with an existing database. It includes three modules:

- Set-up module (configuration, customisation etc.)
- Module for communication with the handheld terminal
- Reading analysis module.

PC Operating Izar software

This software is used to create and manage a subscriber base and process Izar radio data. In addition to the set-up, communication and analysis modules (see Izar Interface), it provides a database module.

Non contractual document. Please have the features specified before ordering.

Distributed by :

If you have any question, please do not hesitate to contact us :



HEAD OFFICE B.P. 160 - 67 rue du Rhône - 68304 Saint-Louis Cedex - France
Tel. +33 (0)3.89.69.54.00 - Fax +33 (0)3.89.69.72.20
Web: www.sappel.com - E-mail: info@sappel.com

EXPORT B.P. 160 - 67 rue du Rhône - 68304 Saint-Louis Cedex - France
Tel. +33 (0)3.89.69.54.21 - Fax +33 (0)3.89.69.54.22
E-mail: export@sappel.com

Imprimerie P. BIELER S.A. - 68330 Huningue