

646, 656 Series

Radio data concentrator and radio repeater

Technical Data Sheet



Description

The **646 Series** concentrator is a device for automatic reading of direct and indirect radio metering devices, which offers the possibility of remote downloading via GSM/GPRS.

SUPERCOM 646



Radio concentrator for reading and storing data acquired by **566 Series** electronic heat cost allocators, **SUPERCOM 541** pulse repeaters, **SUPERCAL 531** calculation units and **SUPERCAL 739** compact energy meters. Coverage range of up to 30 metres, the equivalent of 5 storeys of an average tower block (according to type of structure). Coverage range can be extended by installing up to a maximum of 6 **SUPERCOM 656** repeaters connected in series. Data reading and storage from up to 1000 radio addresses. 433.82MHz bidirectional radio communication (angle-adjustable antenna), optical interface, GSM/GPRS module USB port. Download stored data to a remote PC via a GSM/GPRS connection. Includes software for reading and exporting billing data in Excel format.

Type	Part No.	Power supply
646	0646RX221	230 V

SUPERCOM 656



Radio signal repeater for extending the coverage range of **646 Series** radio data concentrators. Coverage range of up to 30 metres, the equivalent of 5 storeys of an average tower block. Coverage range can be extended by installing 3 additional repeaters of the same series. Capable of carrying radio signals from up to a maximum of 500 radio addresses, including **566 Series** heat cost allocators, **SUPERCOM 541**, **SUPERCAL 531** and **SUPERCAL 739**. 433.82 MHz bidirectional radio communication (angle-adjustable antenna) and USB port.

Type	Part No.	Power supply
656	0656RX101	Battery
656	0656RX221	230 V

Technical features	646 Series concentrator	656 Series repeater
Management capacity	Stores and reads up to 1,000 radio devices (including repeaters)	Carries signal (max 500 radio devices)
Open-field coverage range	Approximately 300m	Approximately 300m
Closed-field coverage range*	Approximately 30m	Approximately 30m
Bidirectional radio communication	Radian 0 protocol 433.82 MHz, 10mW	Radian 0 protocol 433.82 MHz, 10mW
Device interface (protected by seal)	GSM/GPRS USB OPTICAL	USB
Power supply	230 VAC – 50Hz mains	230 VAC – 50Hz mains or 3.6 V battery – format D
Mounting	Holes for wall-mounting and predisposition for DIN rail	Holes for wall-mounting and predisposition for DIN rail
Operating/storage temperature	5÷55/-10÷60°C	5÷55/-10÷60°C
IP rating	IP40	IP40

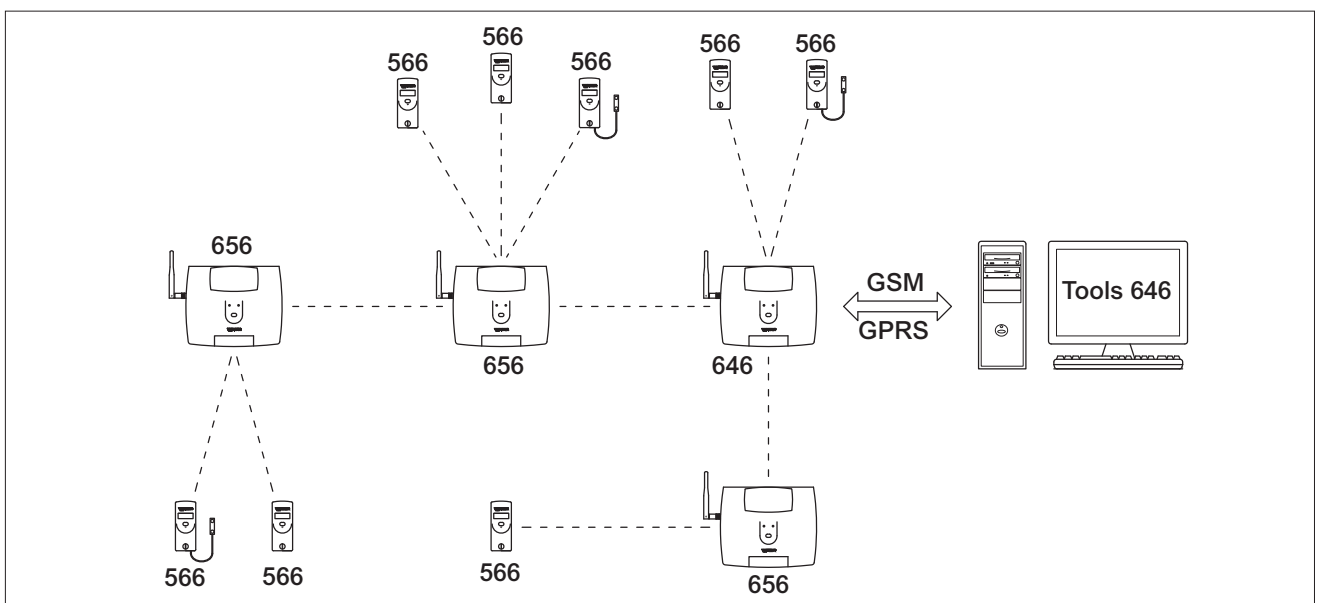
* Indicative value depending on the actual structure of the building.

Application

The **646 Series** concentrator has the capacity to collect and store data from a maximum of 1,000 radio devices and cover a range of 30-35 metres inside a normal building. In a tower block, this makes it possible to install just 1 concentrator for every 2-4 storeys, as a general rule. The **656 Series** repeater has the capacity to carry radio signals from up to a maximum of 500 radio devices to the **646 Series** concentrator. It also has a coverage range of approximately 30 metres inside a normal building. The modular connectivity between the **646 Series** concentrator and **656 Series** repeaters makes it possible to create complex radio-frequency networks with an extended range of coverage. Up to 6 **656 Series** repeaters can be connected directly to each **646 Series** concentrator.

Within the following limits, the networks can be extended as necessary:

- maximum of 1,000 radio devices for each **646 Series** concentrator (including repeaters, if used);
- maximum of 500 devices (566, 541, 531, 739 and 581 Series) for each **656 Series** repeater;
- maximum of 6 **656 Series** repeaters connected to one **646 Series** concentrator;
- maximum of 3 **656 Series** repeaters connected to one **656 Series** repeater.



Installation

Both the **646 Series** concentrator and the **656 Series** signal repeater are equipped with holes for direct wall-mounting and a bracket for DIN-rail mounting. Both devices can be installed either vertically or horizontally.

The **646 Series** concentrator is available only in a 230V mains-powered version, whereas the **656 Series** repeater is available both in a 230V mains-powered version and a version powered by an internal battery, which means it can be installed anywhere, on the basis of radio transmission performance, even if no mains power is available.

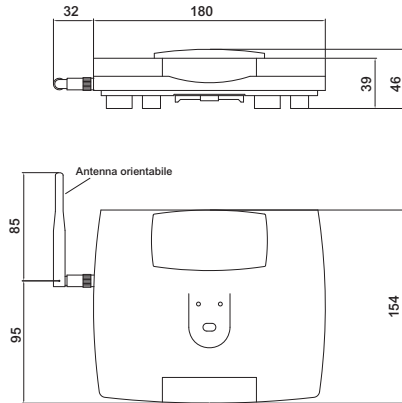
Reading and configuration software

The **646 Series** Tools configuration software supplied with the device enables you to:

- configure the operating parameters of the **646 Series** concentrator and any **656 Series** repeaters;
- download reading data;
- programme up to 5 different time readings.

Overall dimensions (mm)

646 - 656



Specification text

646 Series

Built-in radio modem concentrator for reading heat cost allocators and radio systems **646 Series** – WATTS brand. Bidirectional 433.82 Mhz radio antenna, optical interface and USB port. 230V power supply, built-in GSM modem for GSM/GPRS management. Anti-tamper seal and installation CD included. Features: reading of stored data via radio; programming reading dates; up to 1000 radio addresses reading; reading of the concentrator via GSM/GPRS-M-BUS,RS-232 interfaces. Data stored in XML format.

656 Series

Radio signal repeater **656 Series** – WATTS brand – for extending the coverage range of **646 Series** radio data concentrators. Coverage range up to 30m. Capacity to carry radio signals from up to a maximum of 500 radio addresses. 433.82MHz bidirectional communication (angle-adjustable antenna) and USB port.

The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

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