Transmitter

The FSK-transmitter is a part of Westerstrand Wireless Clock System, a fully automatic system for wireless control of analogue and digital clocks.

The transmitter is a UHF crystal-based FSK transmitter using the licence free ISM band.

The transmitter is intended for connection to a QWTIME III Master Clock.

A time message is transmitted each 10th second using the Master Clock's serial port. The connection between Master Clock and transmitter is done by RS232 or RS485. Default setting is RS232.

Connect the transmitter to the Master Clock. Please note that the cable connector is detachable to make it easier to connect the cable. The connector can be plugged in two different ways, horizontal or vertical.

Repeater

The repeater is built with a receiver and a transmitter. The repeater receives a time message from the main transmitter, amplifies it and then sends it out again.

In order to prevent collision between time messages in the air so-called time multiplex is used, ie. main transmitter sends out its message in 01 seconds, 11, 21, 31, etc. The first repeater sends in seconds 02, 12, 22, etc. Next repeater sends in seconds 03, 13, 23, etc.

Each repeater is individually addressed by means of a switch (DIP switch).
Technical data 123388-00 - Transmitter
Operating frequency 869.525 MHz
Conducted RF power Selectable, 25 mW (+14dBm), 100 mW (+20dBm), 500 mW (+27dBm).
Modulation FSK (Frequency Shift Keying)
Transmission range
Indoor 100 – 200 m
Outdoor 1000 m
Connection RS232 + power (factory default) alt. RS485 + power.
Power supply 36V (from Master Clock)
Temperature range -20°C to +50°C
Protection class IP55
Size 110 x 110 x 65 mm
Standards Radio: EN 300 220
EMC: EN 301 489
Connection to Master Clock
Cable length < 15m use RS232 and a 3-core signal/telecom cable, 3 x 0.20 mm².
Cable length >15 m < 250m use RS485 connection and a 2x2x0.20 mm², shielded cable.

Technical data 123389-00 - Repeater
Operating frequency 869.525 MHz
Conducted RF power Selectable, 25 mW (+14dBm), 100 mW (+20dBm), 500 mW (+27dBm).
Modulation FSK (Frequency Shift Keying)
Transmission range
Indoor 100 – 200 m
Outdoor 1000 m
Power supply 230V AC via mains adapter
Temperature range -20°C to +50°C
Protection class IP55
Size 110 x 110 x 65 mm
Standards Radio: EN 300 220
EMC: EN 301 489

We reserve the right to changes at any time.