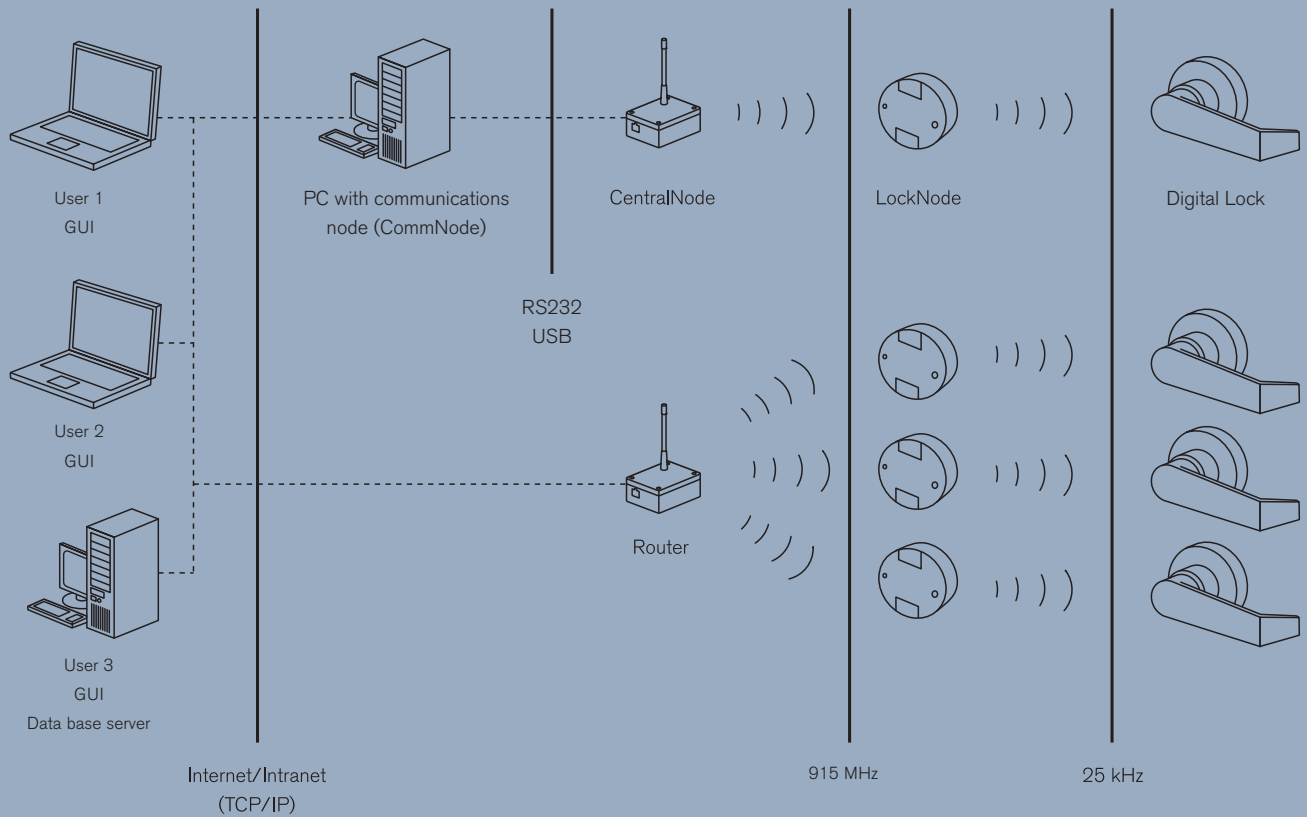


WAVENET NETWORK



- **CENTRAL SYSTEM ADMINISTRATION**

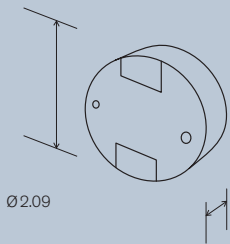
- **FEED IN SIGNALS FROM EXTERNAL SYSTEMS**

- **EVALUATION OF ERROR MESSAGES WITH THE EVENT MANAGER**

WAVENET NETWORK



WaveNet Lock Node



Dimensions in inches

1.46

Network for connecting digital locks and Smart Relays to a central computer. Data is transmitted via multiple media including 915 MHz radio, Ethernet, RS-485 and RS-232. All of the components are supplied in plastic casings. Lock nodes are either battery-operated or powered by external power supply units like router, repeater and central nodes.

COMPONENTS:

- The WaveNet software: the lock system is controlled and managed from a central computer.
- The WaveNet Central Node: this is connected to the computer via an RS-232 or USB port and allows the computer to communicate securely with all of the other subassemblies via an encrypted signal over radio or cable.
- The WaveNet Router Node: The Router node communicates with all WaveNet Lock Nodes and WaveNet Router nodes within its communication range. The WaveNet Router Nodes can be used to extend either the 915 MHz radio signal or the RS-485 hardwired media or convert between the different media. The WaveNet router can be used to convert between Ethernet, RS-485 and/or 915 MHz radio to provide a flexible networking architecture that meets any application.
- The WaveNet Lock Node is mounted next to the SimonsVoss lock or Smart Relay to be networked. The Lock Node then communicates with the rest of the network through 915 MHz radio or RS-485 depending on the model installed.

PRODUCT VERSIONS:

- WaveNet CentralNode with either an RS-232 or USB interface and an RS-485 port or a 915 MHz radio port
- All WaveNet Central, Router and Repeater Nodes are equipped with connection terminals for an external plug-in power supply
- WaveNet Router Nodes are available as repeaters extending either the RS-485 or 915 MHz radio signals
- WaveNet Router Nodes can also serve as a converter from RS-485 hardwired to 915 MHz radio or from 915 MHz radio to RS-485 hardwired
- WaveNet Router Node as converter from Ethernet/WLAN to 915 MHz radio or to RS-485 hardwired media

TECHNICAL SPECIFICATIONS:

- Dimensions of casing Central Node and Router Node: 1.57 x 3.94 x 2.56 inches (40 x 100 x 65 mm), with antenna 5.12 x 3.94 x 2.56 inches (130 x 100 x 65 mm) (H x W x L)
- Voltage supply, Central and RouterNodes: 12 VDC
- Power, CentralNodes: min. 3 VA (250 mA under permanent load)
- Transmitting power of radio module: max. 5 dBm (3.16 mW) to antenna socket
- Sensitivity of radio module: -90 dBm at 19.2 kBaud
- Frequency of radio module: 912 - 925 MHz
- Current consumption of radio module in receive mode: 12 mA at 3.3V
- Dimensions of casing, Lock Node: 1.46 x 2.09 inches (37 x 53 mm) (H x diameter)
- Voltage supply, Lock Node: 2 batteries CR2/3AA, lithium 3.6V
- Current consumption, Lock Node: 25 mA in transmit mode, 15 mA in receive mode, 15 μ A without data traffic
- Transmitting power, Lock Node: approx. 1 mW
- Sensitivity of Lock Node: -95 dBm
- Frequency of Lock Node: 912 - 925 MHz
- Inputs, Lock Node: 3x floating
- Output, Lock Node: Open Drain, max. switching voltage 25 VDC, max. switch-on voltage 2 A, permanent current 650 mA, internal resistance (AN) 0.5 Ω
- Battery lifespan: up to 6 years

WAVENET NETWORK

ORDERING DETAILS:

WaveNet Central Node RS-232 to computer and 915 MHz to network	WN.CN.RS232.RF915
WaveNet Central Node RS-232 to computer and RS-485 to network	WN.CN.RS232.RS485
WaveNet Central Node USB to computer and 915 MHz to network	WN.CN.USB.RF915
WaveNet Central Node USB to computer and RS-485 to network	WN.CN.USB.RS485
WaveNet wireless Lock Node with 3 inputs and 1 output	WN.LN.RF915
WaveNet wired Lock Node with 3 inputs and 1 output	WN.LN.RS.485
WaveNet wireless Lock Node without inputs	WN.LN.RF915.OI/O
WaveNet 915 MHz Repeater	WN.RN.RF915.RF915
WaveNet RS-485 Repeater	WN.RN.RS485.RS485
WaveNet Ethernet Router to 915 MHz	WN.RN.TCPIPRF915
WaveNet Ethernet Router to RS-485	WN.RN.TCPIPRS485
WaveNet WiFi Router to 915 MHz	WN.RN.WIFI.RF915
WaveNet WiFi Router to RS-485	WN.RN.WIFI.RS485
WaveNet Router 915 MHz to RS-485 Conversion	WN.RN.RF915.RS485
WaveNet Router RS-485 to 915 MHz Conversion	WN.RN.RS485.RF915
Antenna extension for Lock Node	WN.LN.ANTV
Input sensor cable for Lock Node	WN.LN.SENSOR.CABLE
Smart Relay to Lock Node hardwire cable	WN.KAB.WIRED-BF
Software licence for network with max. 12 Lock Nodes	TPSW.12
Software licence for network with max. 48 Lock Nodes	TPSW.48
Software licence for network with max. 128 Lock Nodes	TPSW.128
Software licence for network with max. 258 Lock Nodes	TPSW.258
Software licence for network with max. 516 Lock Nodes	TPSW.516
Software licence for network with max. 1,032 Lock Nodes	TPSW.1032