

iGRAIN WIRELESS

iGRAIN RADIO - HUB

WIRELESS NETWORK



General Description

The iGrain Radio-Hub is a wireless substitution for wired RS485 LAN connections and wired 1-Wire networks. The iGrain Radio-Hubs are a WiFi to 1-Wire and WiFi to RS485 interface which are designed to substitute wires between the Sub-Hubs and the Master-Hub

and the Master-Hub and the PC / PLC / SCADA eliminating

the need for wired networks. The Radio-Hub can be configured as Point - to -Point or Point - to - Multipoint networks eliminating the usual wires in a network installation.

Radio-Hub networks can easily be distributed over great distances by implementing Extenders, without having to deal with the challenges associated with the installation of physically large wired networks. The Radio-Hubs comes in various versions for connection to almost all iGrain products such as Master-Hub, RS485 to PLC/SCADA← Sub-Hub, Sensor Cables,

Point to Poin 1 - Wire Network iGrain Sensor Monitoring and Control System CO2 Sniffer

Relay Unit Aeration & n- A Ventilation Fans

CO2 Sniffers, Relay Output Units and Bin Auditors. The Radio-Hubs can also connect iGrain PC and PC base systems to e.g. existing PLC / SCADA Systems

ADVANTAGES

- Available in the 433, 870 and 900 MHz frequency bands
- **Connects to almost all iGrain products**
- Automatic configuration without configuration software
- 1-Wire and RS485 compatible
- iGrain and Modbus and many other protocol compatible
- Large range, 305 m / 1000 ft indoor / 6 km / 4 Miles
- Range extendable by Radio Extender
- **Reduce network implementation cost**
- Simple to install and maintain
- **Low Power Consumption**
- Can be solar powered



Technical Specifications

Operating frequency: Number of Channels: Transmit Power Output: Indoor Range (line of sight): Outdoor Range (line of sight) Serial Baud Rate Range: Supply Voltage: **Current Consumption:**

Temperature Range:

433 MHz. 900 MHz 870 MHz 12 64 64 20 dBm 20 dBm 20 dBm 300 m 300 m 300 m up to 6 km up to 6 km up to 6 km 9600 - 230400

5 or 12 V DC / 110 - 230 V AC Less than 0.5 A -25 to + 50°C