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RADIO FREQUENCY WIRELESS SYSTEM FOR MONITORING AND CONTROL **TELEVIS SYSTEMS**

DESCRIPTION

The Radio Frequency Eliwell system is composed of at least one RadioAdapter / S set to PAN-C (wireless network coordinator) who will be physically connected to the wired network Televisa (access point).

Many wireless nodes are added as needed (up 100 per PAN-C) that is physically connected device via a single TTL (Model: RadioAdapter) or a network Televisa (model: RadioAdapter / S)

Alternatively you can purchase **EXT** models with optional external antenna connection.



RADIO ADAPTER

Allows you to connect wirelessly a single device (port TTL) to the Televis network.

RADIO ADAPTER / S

Function 1: Set as bread-C (network coordinator) becomes the base node that carries the signal from the main Televisa network to wireless nodes. Function 2: Set as node, to connect a remote Televisa network (up to 200 devices) to the main wired network.

RADIO ADAPTER (S)/ EXT

EXT models can connect the external antenna when RadioAdapter module must be placed in a metal casing. To work is to be accompanied by the antenna kit

ANTENNA KIT

Length of 1 meter. Used with EXT models.

WIRELESS NETWORK SETUP

The wireless communication network is comprised of the following components.

RadioAdapter module with pancoordinator role installed near the monitoring system.



A device identificary RadioKey to configure the network..



A maximum of 100 modules RadioAdapter nodes with communication function with the controls. You can connect to a single controller node or a subnet of 240 controls



TECHNICAL SPECIFICATIONS

»Standard: IEEE 802.15.4

"Frequency band: ISM 2. 400 ... 2 GHz, 485 GHz

"Automatic Channel Selection

"2.4 GHz omnidirectional antenna integrated or external

"Supported Network Types: star, tree, mesh

"Supported protocols: Eliwell Televis, MODBUS RTU

"Maximum number of nodes per network: 100

"Connections: RS-485 and TTL for controls Eliwell

»Power: 100 ... 240 Vac 50/60 Hz

"Insulation: Class 2

"Consumption: 2 W

"Case: plastic 3 DIN modules

"Operating temperature: -5 ... 60 ° C

»Operating Humidity: 10% ... 90% RH

(No condensation)

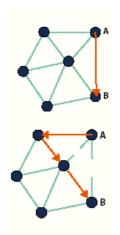
»Storage temperature: -20 ... 85 ° C

»Storage Humidity: 10% ... 90% RH

(No condensation)

MODEL	CODE
RADIO ADAPTER TTL	BARF0TS00NH00
RADIO ADAPTER / S	BARF0DS00NH00
RADIO ADAPTER EXT	BARF0TS20NH00
RADIO ADAPTER / S EXT	BARF0DS20NH00
RADIO KEY TELEVIS	CCA0B0T01T000
ANTENNA KIT	BAKT0AK100000
RADIO ADAPTER TEST	SAW0070K

MÚLTIPLE NODE OPERATION



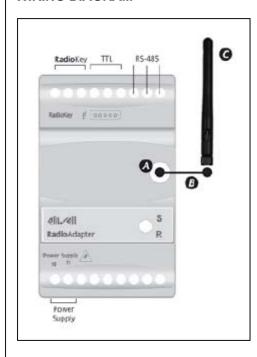
Eliwell technology can achieve the nodes of the network through multiple routes, improving coverage

Thus the rupture of a node does not affect the proper functioning of the network In addition, any node can function as a repeater in turn

MESH NETWORK uses technology, where all nodes can communicate with those around increasing network coverage.

At most one packet of information can jump five different wireless nodes up to the PAN-C (coordinator)

WIRING DIAGRAM



BORNS

RadioKey Connector for RadioKey Link

TTL TTL serial port for direct connection to the instruments

7-8-9 RS-485 serial port for direct connection to the instruments or link the monitoring system (only on models RadioAdapter / S)

100 ... 240 10-11 Va Food

A SMA connector for external antenna (present only in RadioAdapter EXT models)

B external antenna cable (length 1m)

C External Antenna

PLEASE NOTE: For satellite RadioAdapter external use only the cable and antenna provided by Eliwell