

HTM

TRC WIRELESS REMOTE CONTROLLER

FEATURES

- ❖ Direct replacement of signal cables
- ❖ Low power consumption
- ❖ Built in solar power regulator
- ❖ Expandable input & output modules
- ❖ Convertible to GPRS system
- ❖ Repeater functionability
- ❖ Networking feature
- ❖ Flexible & programmable I/O
- ❖ Failsafe control feature
- ❖ Battery powered version available

INTRODUCTION

HTM TRC wireless controllers utilize the world renowned, reliable and well proven *ELPRO 105U or 505U VHF wireless I/O modules manufactured by Elpro Technologies of Australia as the central controllers. They are specifically designed as an alternative to conventional signal & control cables for the remote control and monitoring of pumpsets, valves and any other signals.

Four versions of HTM TRC wireless controllers are available for long range, medium range, low power and battery powered applications. Basic system consists of a control station to be located at the point of control and a remote station located at the point of control signal. Both units are housed in IP67 weatherproof wall or floor mounted cabinet to be specified upon order. Solar power regulator is included in certain versions for direct connection of solar panel and batteries to the unit for application in remote area where power supply is not available. When connected to float switch, battery powered version can be used for level control at remote locations for up to 2 years before battery replacement.



APPLICATIONS

HTM TRC wireless controllers are suitable for the transmission of any instrument data using 4-20mA, digital pulse, digital on/off signals such as flow, level, pressure, status, totaliser etc without using any physical hard wire.

Typical applications of HTM TRC wireless controller include remote pump & valve control, reservoir water level and flowmeter monitoring in water supply systems. The unit can also be connected to optional GPRS modem for transmission of data over unlimited distance. Up to 94 units of remote stations can be linked to a control station in a network. There is no network master and any station can communicate with every other station. Any input at any station can be linked to output at any station using a simple network configuration program. All data transmitted has high security encryption and can only be understood by another HTM TRC wireless controller. All controllers can be programmed to have failsafe feature depending on the type of application.

If reliable radio path cannot be established between two stations, the radio message can be passed via up to five stations which act as part time repeaters.

SPECIFICATIONS

General

Models available : 105H, 105L, 505L, 505B
Operating temp. range : -20°C to 60°C
Humidity : 0-99%RH
Antenna connection : BNC
Analog input (AI) : 4-20mA, differential or floating
Analog output (AO) : 4-20mA, sink to common
Analog accuracy : +/-0.1%F.S
Analog set points : Configurable high & low DO for remote outputs
Digital input (DI) : Suitable for voltage free contact or NPN transistor
Pulse input (PI) : Part of digital input, max 100Hz
Pulse output (PO) : FET 500mA@30VDC max. 100Hz.
Digital output (DO) : Relay contact, 2A@30VDC
Data transmission type : Exception reporting plus integrity update
Data update rate : user- configurable
EMC compliance : 89/336/EEC, FCC Part 15, AS3548
Enclosure : Steel to IP67 with polyester coating
Mounting : Wall or floor
Dimensions (mm) :
Wall mounted : 400W X 500H X 250D
Floor standing : 400W X (500+650)H X 250D
Approval of controllers : SIRIM (Malaysia)

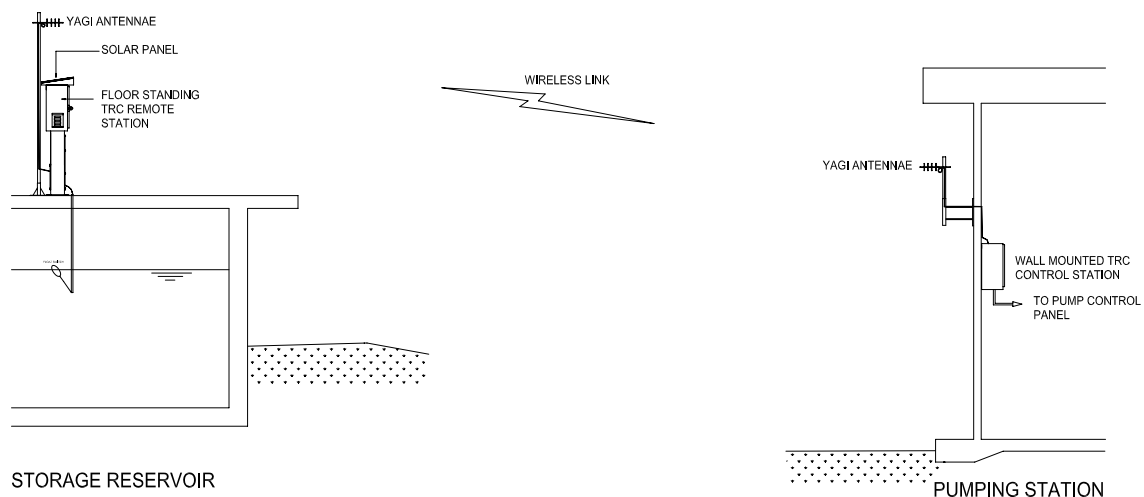
Model 105H & 105L

Input/Output :
Basic: 2AI/2AO/4DI/4DO/1PI/1PO
Optional : Add up to 31 Elpro modules
Frequency range : 380-512MHz/12.5KHz
Line of sight range :
105H : Up to 10km (0.5W)
105L : Up to 40km (5W)
Unit address : 1 to 32,768
Communication type : 2 way
Power supply : DC12V, 24V or 230VAC
Aux. power supply : 24VDC 150mA max.
Repeater function : Yes
Antennae type : Dipole or Yagi
Optional : Solar panel with 12V 7.2AH battery

Model 505L & 505B

Input/Output : 1AI/2DI/1PI
Frequency range : 405-490MHz/12.5KHz
Line of sight range : Up to 10km
Unit address : 1 to 3,000
Communication type : 1 way
Power Supply
505L : DC12V or 230VAC
505B : Battery powered for 2 years
Aux. power supply : 24VDC 30mA max.
Repeater function : No
Antennae type : Dipole or Yagi
Optional : Solar panel with 12V 7.2AH battery

TYPICAL APPLICATION



*Notes: Elpro is the trade mark of Elpro technologies, Australia
Data sheet of Elpro control modules available upon request.

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Manufactured by :

2/2008

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