



Option 1: The Hanwell 6-Channel Digital I/O Replicator is designed to transmit information from any volt-free ON/OFF alarm to alarm enunciator panel(s) around a building or site. This enables alarms to be seen in multiple locations without the need for wiring around the entire site. This reduces installation and/or relocation costs.

The replicator consists of two discrete sections: the transmitter unit(s) and the receiver unit. The transmitters monitor digital inputs, detecting whether they are open circuit or closed, then send this status back to the receiver via radio signals. The receiver then acts on the signals received: either opening or closing a set of Volt-free switches accordingly.

During normal operation, the transmitter(s)' microcontroller scans the inputs once every 0.5 seconds. It compares the current readings with the previous readings and immediately transmits any changes from the previous readings three times in quick succession. The unit retransmits the status of all six channels every three minutes, even if there has been no change. This is to confirm the unit is operating.

The receiver unit has 6 pairs of volt-free outputs, capable of switching 30V 1Amp DC. It also has a jack-socket for the alarm relay output: this will open in the event of either mains power failure or failure to receive a radio signal for 10 minutes).

There are two transmitter options:

Option 1 below right, uses a 6-channel transmitter unit, sending information to a matching 6-channel Receiver Unit.

Option 2 uses a 3 x rl-2000 transmitter units, each with 2 input channels, sending information to a 6-channel Receiver Unit. With this option, the ON/OFF data from the 3 transmitter units can be logged in the Hanwell Radiolog environmental monitoring system

Digital Replicator

Product Code

Option 1: RR-xx*-P^r -RX and 1 x RR-xx*1-P^r-TX

Option 2: RR-xx*1-P^r-RX and 3 x RL2000-16-16-xx*1-P^r

Series Digital Replicator

Typical Applications

- ° Float switches
- ° Alarm Contacts
- ° Any volt-free ON/OFF alarm indicator

Instrument

Dimensions: 95 x 75x 52 mm

Weight: 450 grams

Power Supply: 12V DC mains (*P4 UK, P5 EU, P6 US)

Case Material(s): ABS

Operating Humidity Range: 0...90% RH, non-condensing

Operating Temperature Range: -15...+70°C

(Temperature compensated range)

Input Channels:1

Communications & software

PC/Logger Interface: USB A /USB mini-B

Software: 32bit Windows

Minimum O/S: Windows 2000, Windows XP, Windows NT

Radio

*Radio Frequency: 434.075MHz

433.920MHz

433.875 - 434.650MHz

in 25KHz increments

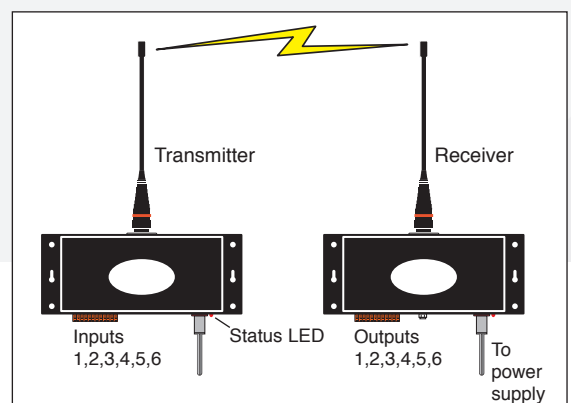
Radio Power: 10 mW

Radio Range: 3 km over open ground

Accessories

Cable 5m length (standard) or as required

Nominal 8mm diameter





Option 2: The Hanwell 6-Channel Digital I/O Replicator is designed to transmit information from any volt-free ON/OFF alarm to alarm enunciator panel(s) around a building or site. This enables alarms to be seen in multiple locations without the need for wiring around the entire site. This reduces installation and/or relocation costs.

The replicator consists of two discrete sections: the transmitter unit(s) and the receiver unit. The transmitters monitor digital inputs, detecting whether they are open circuit or closed, then send this status back to the receiver via radio signals. The receiver then acts on the signals received: either opening or closing a set of Volt-free switches accordingly.

During normal operation, the transmitter(s)' microcontroller scans the inputs once every 0.5 seconds. It compares the current readings with the previous readings and immediately transmits any changes from the previous readings three times in quick succession. The unit retransmits the status of all six channels every three minutes, even if there has been no change. This is to confirm the unit is operating.

The receiver Unit has 6 pairs of volt-free outputs, capable of switching 30V 1Amp DC. It also has a jack-socket for the alarm relay output: this will open in the event of either mains power failure or failure to receive a radio signal for 10 minutes).

There are two options:

- **Option 1** uses a 6-channel transmitter unit, sending information to a matching 6-channel receiver unit.
- **Option 2** uses a 3 x r12000 transmitter units, each with 2 input channels, sending information to a 6-channel receiver unit. With this option, the ON/OFF data from the 3 transmitter units can be logged in the Hanwell Radiolog environmental monitoring system.

Digital Replicator

Product Code

Option 1: RR-xx*-P* -RX and 1 x RR-xx*1-P*-TX
Option 2: RR-xx*1-P*-RX and 3 x RL2000-16-16-xx*1-P
Series Digital Replicator

Typical Applications

- Float switches
- Alarm Contacts
- Any volt-free ON/OFF alarm indicator

Instrument

Dimensions: 95 x 75x 52 mm
Weight: 450 grams
Power Supply: 12V DC mains (*P4 UK, P5 EU, P6 US)
Case Material(s): ABS
Operating Humidity Range: 0...90% RH, non-condensing
Operating Temperature Range: -15...+70°C
(Temperature compensated range)
Input Channels:1

Communications & software

PC/Logger Interface: USB A /USB mini-B
Software: 32bit Windows
Minimum O/S: Windows 2000, Windows XP, Windows NT

Radio

*Radio Frequency: 434.075MHz
433.920MHz
433.875 - 434.650MHz
in 25KHz increments
Radio Power: 10 mW
Radio Range: 3 km over open ground

Other Information

Reaction Time at Receiver Unit: < 5 seconds
Receiver Unit Alarm Output: Volt-free 3.5mm mono jack (normally closed)
Input/Output Connections: Volt-free screw-terminals

