

## RCU50R Series

### 1+1, 2+1 Remote Mounted Redundancy Control for BUC/BDC/LNB's



**RCU50R** for 1+1 control  
**RCU52R** for 2+1 control

The **RCU50R** 1+1 & **RCU52R** 2+1 remote mounted units provide a fully outdoor BUC, BDC or LNB redundancy switching control solution, which minimises cross-site control and drive cables, costs and complexity whilst improving antenna isolation.

The units are designed to drive and monitor remote mounted BUC's, BDC's & LNB's. A range of 10MHz reference signal generation, locking and pass through options as well as DC supply can also be provided to drive the BUC, BDC & LNB units.

For LNB's, waveguide switch drive and monitoring is provided along with optional external L-band coaxial switches (for non-ganged WGS applications). For BUC's & BDC's, external SHF co-axial switch units can be provided.

The **RCU50R, 52R** units are designed for remote control via Ethernet, but are also offered with basic local controls. Remote control includes an embedded web-browser with SNMP network management support. In remote mode, the on-line unit can be selected and monitored whilst keeping switch-over automatic in case of failure.








Peak can offer dedicated indoor rack mounted user interface units (Ethernet based), see **FPC100**.

In AUTO mode, the unit monitors the alarm signals or DC current (with user settable alarm levels) and if a fault condition develops within the on-line unit, traffic is automatically switched to the standby unit.

The flexibility of the design allows for customization, so please consult the factory if the features that you require are not shown on this data sheet.

Peak can supply external switches and cabling, for more details please consult the factory.

### Peak Features

-  External waveguide or co-axial switch control
-  Comprehensive remote control, plus local manual controls and indicators
-  Minimises capex through reduced cross-site control and drive cable costs
-  Improves electromagnetic antenna isolation
-  DC drive with current sensing and user settable alarm levels
-  Compatible with most makes of LNB
-  Optional reference generation, external reference locking or 'pass-through'



## RCU50R, 52R Units – Typical Specification

### External waveguide switch Interface

|             |   |
|-------------|---|
| Connection  | Circular multi-pole, weatherproof (mating part supplied)                            |
| Drive type  | +12VDC pulsed, latching, and indicators   |
| Option 10a; | +12VDC for waveguide switch   |
| Option 10b; | +24VDC for waveguide switch   |
| Switch      | Optional supply of external waveguide switches (please consult factory for details) |

### DC drives

|                  |   |
|------------------|---|
| DC supply        | Factory settable, regulated.<br>Multi-voltage for range switching available         |
| Connection       | Circular multi-pole, weatherproof (mating part supplied)                            |
| Alarm monitoring | Current monitoring with user settable alarm levels, auxiliary external alarm inputs |

### Internal reference generator (Option 4)

Internal reference generator, fed via a separate discrete connection). Includes an external reference input connection and automatic locking facility.

|                |   |
|----------------|---|
| Output         | 10MHz at 0dBm nominal on TNC (f), 50Ω                     |
| Stability      | $<5 \times 10^{-10}$ over 1s, $<5 \times 10^{-9}$ per day |
| Ageing         | $<5 \times 10^{-7}$ per year                              |
| Temp stability | $<5 \times 10^{-8}$ over 0 to 50°C                        |

### Mechanical

|              |  |
|--------------|--|
| Dimensions   | 290 x 230 x 95mm (11.4 x 9.1 x 3.7inch)      |
| Construction | Die-cast Aluminium, weatherproof, IP66 rated |
| Weight       | Approx. 4kgs (9lbs)                          |

### Environmental

|                |                                  |
|----------------|----------------------------------|
| Operating temp | -10°C to +50°C (less solar gain) |
| Option 12;     | -40°C to +50°C (less solar gain) |
| Humidity       | 0-100% condensing                |
| EMC            | EN55022 part B & EN50082-1       |
| Safety         | EN60950                          |

### Power Supply (dual input)

|            |   |
|------------|---|
| Voltage    | +27 to +36VDC   |
| Power      | 20 Watts nom (option dependent)                         |
| Connection | Multi-pin circular, weatherproof (mating part supplied) |

### Control System

|                |  |
|----------------|--|
| M&C            | LED indicator & summary failure relay (form C)<br>Local switches & indicators for local /remote and source selection |
| Remote control | Ethernet; embedded web server & SNMP network management support  |
| Connection     | Multi-pin circular, weatherproof (mating part supplied)  |

### Options

- 1) Cable assembly for use between RCU, units and waveguide switch system
- 4) Internal reference generator to drive units via a TNC interface
- 10a) +12VDC external waveguide switch drive
- 10b) +24VDC external waveguide switch drive

## Connection Panels

