

T1000LR and R1000LR

1+1 Redundancy Unit for the P7001R/ P7002R Remote Mounted Agile Converters.



The **T1000LR and R1000LR 1+1 Redundancy units** are designed to take advantage of the 1+1 redundancy control interface which is built in as a standard feature of the **P7001R & P7002R** series of synthesized remote mounted Frequency Converters.

The system is designed to provide redundancy for a single-feed system, maintaining maximum availability whilst allowing routine maintenance and repair work to be carried out on the standby converter, without the normally associated down-time.

The system maintains one converter on-line whilst the other is held in hot standby, allowing the user to select and monitor the on-line converter, or the automatic mode chosen where the system monitors the Converter alarm status and if a fault condition develops within the on-line Converter, automatically switches traffic to the standby unit.




The redundancy unit can be controlled via the **P7001R or P7002R** which in turn is controlled by the user from either a PC based M&C system (RS232/ 485/ Ethernet) or a rack mounted control panel (See the **P7001R or P7002R** series datasheets for details).

The **T1000LR** Redundancy Interface unit has connections for the UpConverter (Transmitter) or P7002R and the **R1000LR** for the DownConverter (Receiver) or P7001R.

Options exist to include remote mounted BUC/ BDC's in a chain-redundant 1+1 switching arrangement.

The unit is housed in a rugged weatherproof chassis, suitable for either internal or external/remote locations.

Peak Features

-  High quality, matched IF, L-Band & control cable set for interfacing to the P7001R/P7002R included as standard.
-  BUC/BDC chain-redundancy switching options available.
-  Rugged weatherproof housing.



T1000LR & R1000LR – Typical Specification

IF & L-band Interfaces

Frequency	
IF	50 to 200MHz
L-band	DC to 2GHz
Connections	50Ω, N-type (f)

Switch Element Parameters

Type	Co-axial, latching
------	--------------------

Typical System Performance

The following gives the typical performance that can be expected from a system comprising Peak Converters & using the high quality matched IF & L-band cable sets;

Gain Flatness	±1dB full band
Insertion loss (excludes converter gain)	
IF	3.5dB
L-Band	0.5dB
SHF	For Option 2a please consult the factory for frequency dependent performance.
10MHz	0.5dB
Switching speed	<800ms (from fault to switch completion)

General

Mechanical

Width	172mm (6.8”), plus connections & mounting flanges
Height	123mm (4.85”), plus connections
Depth	48mm (1.89”)
Construction	Die-cast Aluminium, IP66 rated
Weight	1.4kgs (3lbs) approx.

Control System

Converter Interface	5-pin circular, weatherproof (mating part supplied)
---------------------	---

Environmental

Operating temp.	-25°C to +70°C
EMC	EN 55022 part B & EN 50082-1
Safety	EN 60950

Options

- 1) 75Ω IF connections.
- 2a) BUC/ BDC included in 1+1 chain-redundancy configuration.

Associated Products;

- P7001R** Remote Mounted Agile DownConverter
- P7002R** Remote Mounted Agile UpConverter
- FPC100** Rack Mount Control Panel (1RU)

