

T2000, R2000, TR2000 and A1000L

2+1 Redundancy Interface for the P7000 & IBUH/ IBDH series of frequency converters, and the ILAH series of Line Amplifiers.

- T2000L, R2000L, TR2000L for use with;
P7000 series IF/ L-Band Synthesised Converters
- T2000H, R2000H, TR2000H for use with;
P7000 series IF/ SHF (S, C, X, Ku-Band) Synthesised Converters
- T2000H(DBS) for use with;
P7018 series IF/ SHF (DBS-Band) Synthesised Converters
- T2000HH, R2000HH for use with;
IBUH, IBDH series L/ SHF (S, C, X, Ku-Band) Block Converters
- T2000HH(DBS) for use with;
IBUH series L to SHF (DBS-Band) Block UpConverters
- T2000HH(Ka), R2000HH(Ka) for use with;
IBUH(Ka), IBDH(Ka) series L/ SHF (Ka-Band) Block Converters
- A2000L for use with;
ILAH series L-Band Line Amplifiers

The T2000, R2000, TR2000 & A2000L 2+1 Redundancy Interface units are designed to take advantage of the redundancy control interface which is built in as a standard feature of the P7000 series of Synthesised converters, the IBUH, IBDH series of Block frequency converters and the ILAH series of Line amplifiers.

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




The system maintains two units on-line whilst the other is held in hot standby, and allows the user to select the on-line unit. The redundancy unit can be controlled from the front panel of the Converters/ Line Amplifiers (Local mode) or via the Converter/ Line Amplifier RS232/ 485 link to a host computer (Remote mode). In remote mode, the on-line units can be selected and monitored whilst keeping switch-over automatic in case of failure.

In automatic mode, the system monitors the Converter/ Line Amplifier alarm status and if a fault condition develops within the on-line Converters/ Line Amplifier, automatically switches traffic to the standby unit.

The T2000 Redundancy Interface unit has connections for the Upconverter (Transmitter) or BUC series, the R2000 for the DownConverter (Receiver) or BDC series and the TR2000 for the combined Up/DownConverter unit. The A2000L has connections for the Line Amplifier.

The unit is standard 19" Rack Mountable and having no front panel controls (control is via the Frequency Converters), can be mounted in the rear of the rack behind the converters and connected with the cables provided. The units are designed to pass the DC and 10MHz external reference frequency required to lock an LNB or BUC.

Peak Features

-  High quality, matched IF, L-Band & RF (as appropriate) cable set included as standard.
-  Does not require rack 'front panel' space.
-  Fully compatible with Peak P7000, IBUH, IBDH & ILAH series of units.



T2000, R2000, TR2000 & A2000L - Typical Specification

IF, L-band & RF Interfaces

| | |
|---|-------------------------------|
| Frequency | |
| IF | 50 to 200MHz |
| L-band/RF | DC to 14.5GHz |
| RF (DBS) | to 18.4GHz |
| RF (Ka) | to 31.0GHz |
| Connections (for use with P7000 series Converters) | |
| IF | 50Ω, BNC (f). Option 1; 75Ω |
| L-band/ RF | 50Ω, N-type (f) |
| Connections (for use with IBUH, IBDH series Converters) | |
| L-Band/ RF | 50Ω, SMA (f) |
| Connections for IBUH(Ka), IBDH(Ka) series Converters | |
| L-Band | 50Ω, SMA (f) |
| RF (Ka) | 50Ω, K-Type (f) or 2.92mm (f) |
| Connections for ILAH series Line Amplifiers | |
| L-Band | 50Ω, SMA (f) |

Switch Element Parameters

Type Co-axial, latching

General

Mechanical

| | |
|---------------|-----------------------------|
| Width | 19", standard rack mount |
| Height | 1U (1.75") |
| Depth | 150mm (6"), plus connectors |
| Weight (nom.) | 2kgs (4.4lbs) |
| Construction | Aluminium chassis |

Environmental

| | |
|-----------------|------------------------------|
| Operating temp. | 0 to +50°C |
| EMC | EN 55022 part B & EN 50082-1 |
| Safety | EN 60950 |

Control System

Converter Interface 9 way, D-type.

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/RF cable set;

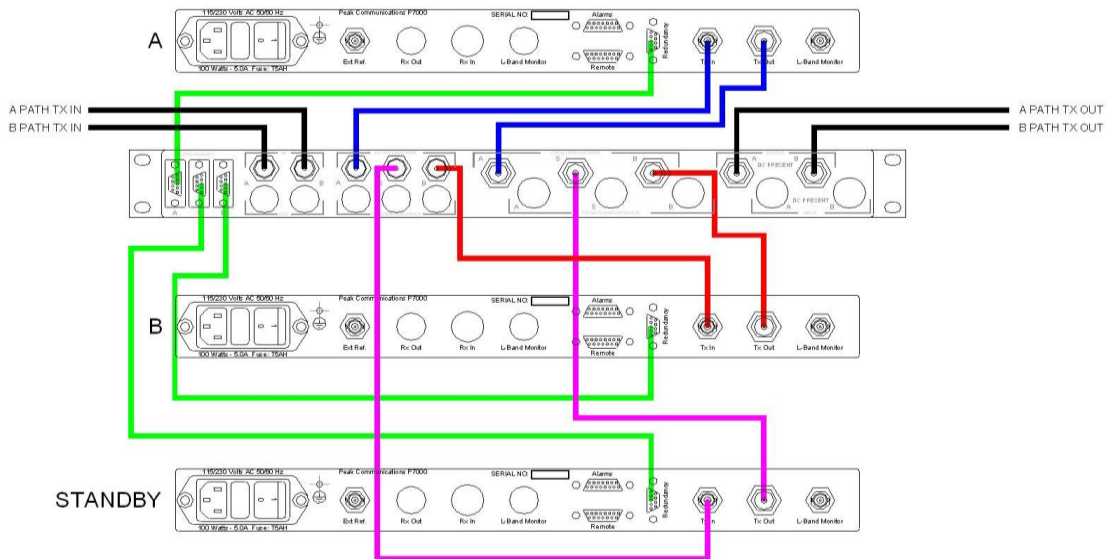
| | |
|--|--|
| Gain Flatness | ±1dB full band, band specific |
| Insertion loss (excludes converter gain) | |
| IF | 6.5dB (7.5dB for 75Ω option) |
| L-Band | 0.75dB |
| S-Band | 0.75dB |
| C-Band | 1.75dB |
| X-Band | 2.25dB |
| Ku-Band | 2.75dB |
| DBS-Band | 3.25dB |
| Ka-Band | 3.75dB |
| 10MHz | 0.75dB |
| Switching speed | <800ms (from fault to switch completion) |

Options

- 1) 75Ω IF interface.



Wiring Configuration (example for the T2000L connected to P7002, IF to L-band UpConverters);



Rear Panel (T2000L example);

