

Redundancy Switching unit C Band 1 :2 Redundant Line amplifier GTS6872



This switching unit is required for automatic redundancy switching of C-Band signals in the frequency range 3.400...4.200 MHz.

Design

The unit is housed in a 19" subrack with very good RF shielding and consists of the following sub-assemblies:

- solid-state switches DPDT
- attenuators, fix and programmable
- amplifiers
- control logic
- redundant power supply modules
- LAN interface
- mimic with manual control

All the necessary signal and power supply connections as well as the mains switches are provided at the rear.

Control

A manual control module with LC display and pushbuttons could be integrated on the front panel. The integrated webserver allows the unit configuration, shows status information and obtain trouble shooting information.

Gain setting and selection of the RF path could be also done manually on the front panel.

Special features

A status string can also be requested at any time via the control interface.

The unit is constructed using a modular approach utilising plug-in sub-assemblies which enable ease of installation and maintenance.

Technical data	measured a 25° C
Model number:	GTS6872
Item number:	1200243
Configuration:	2:1 redundancy, consisting of 4 switches DPDT 3 programmable attenuators 3 amplifiers
RF specifications	
Impedance (Ohm):	50
Frequency range (MHz):	3.400...4.200
Gain (dB):	30 adjustable 0...30 dB, 1dB steps
Gain flatness (dB):	+/-1.0 max.
Noise figure (dB):	12 dB max. at max. gain
VSWR:	2.0 : 1 max.,
Isolation (dB):	40 min.
Input power (dBm):	-10 max. at gain 30 dB
P1 dBc (dBm):	+12 at gain 20 dB, output
Switching time (ms):	10 max. (without PC time)
Further specifications	
Control:	LAN
Manual control:	
Gain setting	
Switch via mimic	push buttons with LED to show signal flow
RF connectors:	
Inputs	SMA female
Outputs	SMA female
Power supply (Vac, Hz):	115/230, 50/60, redundant
Connector	3-pin, with mains filter & fuses integrated in the power supplies
Mains switches:	
Temperature range (°C):	
Operating	0...40
EMC:	in accordance to Eur. standard EN 61000-6-1 & EN 61000-6-3
Dimensions:	
Height (RU)	1
Width (inch)	19
Depth (mm)	about 380 (without connectors & handles)
Front panel:	painted (RAL7021)

Designed & produced by NOVOTORNIK GmbH

