

Alcatel 9774- N+1 redundancy for Frequency Converters

Product description

This leaflet describes the N+1 redundancy option for the Alcatel 9774 - series of frequency converters operating in different communication bands.

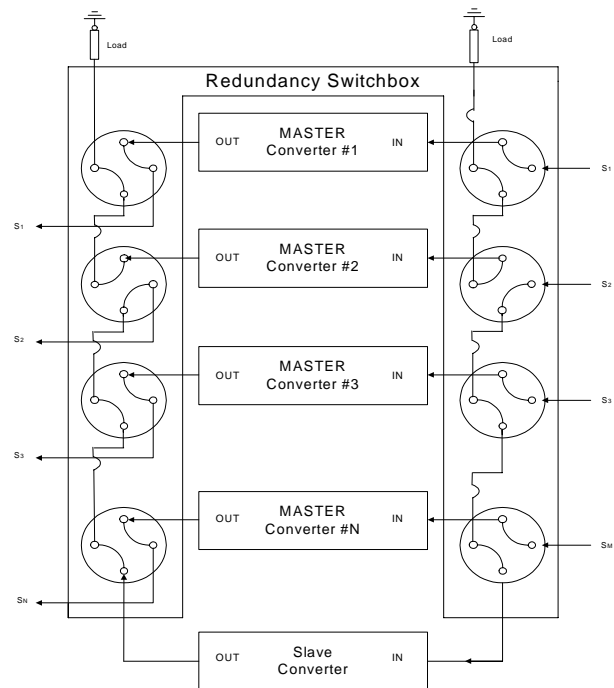
The redundancy channel switching configuration is of an N+1 type, e.g. that there is 1 backup channel per N active channels.

Main Characteristics

- All frequency converters including the slave unit are identical
- All frequency converters operate as independent units, so that all system channels remain active during maintenance / repair.
- The user can configure each converter to be either MASTER or SLAVE.
- A 1+1 configuration can be upgraded to an N+1 without system channel interruption.
- Up to 12 + 1 units are supported.

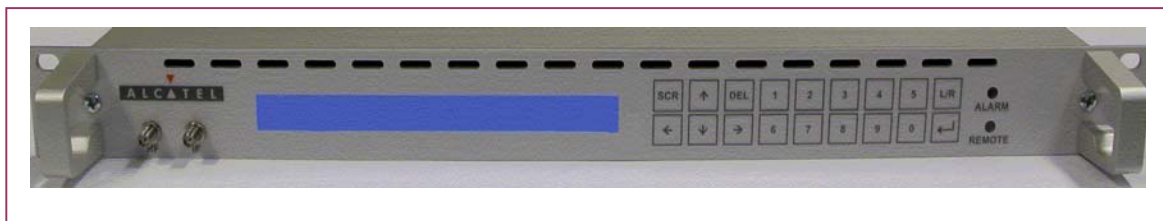
Ordering info

A99774-350	N+1 option	
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Applications

- Used for Voice, data and digital/analogue video transmissions.
- Full compliance with international performance specifications like IESS 308, IESS 309 and IESS 310





N+1 Specifications

- Following converter error signals trigger a backup unit switch-over:
 - LO unlock
 - unit power failure
 - fan alarm
 - test alarm.
- The slave unit has 2 automatic operating modes:
 1. BACKUP mode: continuously “polling”, saving the MASTER configurations and checking for errors on the MASTER unit(s);
 2. ACTIVE mode: The SLAVE unit configuration is automatically set to the last known configuration of the failing MASTER unit. Its RF/IF channel is switched-over and the active channel is rerouted to the SLAVE unit.
- A switch-over condition is indicated on the SLAVE units’ display.

Hardware description

The hardware concept is built up as following:

- Transfer unit: one per active channel; is a separate unit containing the RF and IF switches used for rerouting of the active channel, fixed onto a rail at the back of the MASTER unit. The Transfer unit is powered by the SLAVE unit
- Polling for settings and configuration of the MASTER units is set up through an Ethernet network.
- The alarm interconnections between the MASTER and SLAVE units are established by a link cable between the backpanels of all units (Fast Alarm Bus).

Environmental

Weight (transfer unit): 1 kg max
Operating temperature range: 0...50°C
Non-operating temperature range: -40°C ...+70°C

Interfaces

Transfer unit:

- RF input interface :
 - Impedance : 50 Ω
 - Type: SMA-female
 - Port Insertion loss: max 0.5 dB (DC-18 GHz)
 - Port Isolation: min 60 dB (DC-18 GHz)
- IF output interface :
 - Impedance : 50 Ω (optional 75 Ω)
 - Type: SMA-female (optional BNC-female)
 - Port Insertion loss: max 1 dB (70/140 MHz)
 - Port Isolation: min 60 dB (70/140 MHz)

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