

Intelligent Optribution Chassis



The final product may vary from the above image depending on the options selected.

Product

DEV 7113

Intelligent Optribution Chassis; 20 Slots

Features

- /// Versatile 3 RU Chassis for up to 20 Optical Modules
- /// 50 Ohm, SMA (f) or 75 Ohm, F (f) or 75 Ohm, BNC (f)
- /// 1+1 Redundancy Options for CATV-Band or for L-Band
- /// Automatic Switch Back / Main Backup Swap Option for 1+1 Redundancies
- /// N+1 Redundancy Options for CATV-Band or for L-Band
- /// RGC (Redundancy path Gain Compensation) for n+1 Redundancy
- /// CWDM for 4, 8, and 9 Channels
- /// DWDM for up to 49 Channels, max. 16 Channels per Chassis
- /// CPU Controller with Ethernet plus SFP slot (Option 53)
- /// Chassis can be enabled for the application of LNB Powering Products
- /// SNMP Support
- /// DEV Web Interface
- /// Signal Recording and Data Backup Feature
- /// Power Supply Redundancy

DEV 7113 Intelligent Optribution Chassis

	Value	Condition
Capacity		
Front Side	20 Slots (max. 20 Optical Channels with Single Link Modules, max. 40 Optical Channels with Twin Modules)	
Remote Communication		
Interface (Connector)	Ethernet (RJ-45)	
Remote Control & Surveillance	via Web Interface and via SNMP	
Redundant Power Supply		
Supply Voltage	100...240 V AC supplied by two different Lines	
Power Consumption	<600 VA	
General Specifications		
Size	19" (483 mm) Width, 3 RU (133 mm) Height, ~470 mm + max. 80 mm (Optical Connectors) Depth	
Weight	~9 kg	empty Chassis
Environmental Conditions	ETS 300019 Part 1-3 Class 3.1E	

Option 28 Automatic Switch Back / Main Backup Swap

Either functionality can be selected via a configuration menu:

Automatic Switch Back:

Automatic Switch Back enables the autonomous switching back from the redundant link to the main link based on the RF Sensing functionality.

Main Backup Swap:

Main Backup Swap enables the dynamic change of main and backup assignment to realize the autonomous switching from the backup link to the main link in addition to the (standard) autonomous switching from the main link to the backup link.

■ Available for 1+1 Rx redundancies

Option 34 Chassis prepared for DWDM Modules, 16 Slots

The chassis is prepared with redundant fan modules for the installation of DWDM modules.

■ Up to three DEV 7658 (1:8 DWDM optical de-/multiplexer with extension port) can be installed in addition to the optical Tx/Rx modules.

■ In addition to 16 optical Tx/Rx modules, one EDFA amplifier module can be installed; this leaves space for up to two DEV 7658.

■ Up to 6* 1+1 redundancy options can be installed in combination with Option 34.

■ 1* 4+1 or 1* 8+1 redundancy options can be installed in combination with Option 34.

Option 53 Change Ethernet to Ethernet plus SFP Slot

When Option 53 is ordered, the CPU module will include both Ethernet and SFP slot. The additional SFP slot enables remote management and control of the DEV 7113 via an optical link, and open compatibility with CWDM or DWDM optical links

Option 54 SFP Ethernet Module

The SFP Ethernet Module is to be applied in one optical slot. The SFP Ethernet Media Converter can be equipped with any SFP module that is appropriate to the application requirements.

Option 82 Chassis enabled for LNB Powering Products

The chassis is enabled for the application of up to 20 LNB Powering Modules DEV 8121.

Option 84 RF Monitoring for LNB Powering Products

In combination with Option 82, RF Monitoring is enabled for the LNB Powering Modules DEV 8121.

Cabling Options

Cabling options are used for stand-alone optical Tx or Rx modules, to be configured per 4 modules.

■ Available in 50 Ohm with SMA (f) or in 75 Ohm with F (f) or with BNC (f) connectors

1+1 Redundancy Options

1+1 redundancy options are used to realize a redundant optical link to a dedicated main link.

- Available for 47...1006 MHz or for DC, 950...2150 MHz in 75 Ohm with F (f) connectors
- Available for DC, 850...2450 MHz in 50 Ohm with SMA (f) connectors
- Up to 10* with single link modules and up to 16* with twin modules
- A mix of Tx or Rx redundancies is allowed
- A mix of single link modules and twin modules is not allowed
- A mix with stand-alone optical Tx or Rx modules is allowed
- A mix with n+1 redundancy options is not allowed
- Link gain will be decreased by ~5 dB

	Value	Condition
Return Loss	>14 dB	
Slot Requirements (F: Front, R: Rear)	<ul style="list-style-type: none"> • 2F+1R Slots for a single 1+1 Redundancy w/ Single Link Modules • 4F+1R Slots for two 1+1 Redundancies with Single Link Modules • 2F+1R Slots for two 1+1 Redundancies with Twin Modules 	

N+1 Redundancy Options

N+1 redundancy options are used to provide a redundant optical link to a number of main links.

- Available for 47...1006 MHz or for DC, 950...2150 MHz in 75 Ohm with F (f) connectors
- Available for DC, 850...2450 MHz in 50 Ohm with SMA (f) connectors
- Up to 4* with single link modules or up to 8* with twin modules for a 4+1 redundancy option
- Up to 2* with single link modules or 2* with twin modules for a 8+1 redundancy option
- 1* with single link modules or 2* with twin modules for a 12+1 or 16+1 redundancy option
- A mix of n+1 Tx redundancies with n+1 Rx redundancies with different sizes is allowed
- A mix with stand-alone optical Tx or Rx modules is allowed
- A mix with 1+1 redundancy options is not allowed
- Link gain for main links will be decreased by ~2 dB for 4+1 redundancy options and by ~5 dB for all other n+1 redundancy options

	Value	Condition
Number of Main Channels (n) per Redundancy Option	4, 8, 12, or 16	
Return Loss (Signal Path)	>14 dB	
Slot Requirements (F: Front, R: Rear)	<ul style="list-style-type: none"> • 5F+1R Slots per 4+1 Redundancy with Single Link Modules • 5F+2R Slots per two 4+1 Redundancies with Twin Modules • 10F+2R Slots per 8+1 Redundancy with Single Link Modules • 11F+4R Slots for two 8+1 Redundancies with Twin Modules • 14F+3R Slots for a 12+1 Redundancy with Single Link Modules • 15F+6R Slots for two 12+1 Redundancies with Twin Modules • 18F+4R Slots for a 16+1 Redundancy with Single Link Modules • 19F+8R Slots for two 16+1 Redundancies with Twin Modules 	

Order Information

Optribution Chassis

DEV 7113	Intelligent Optribution Chassis; 20 Slots
Option 28	Automatic Switch Back / Main Backup Swap
Option 34	Chassis prepared for DWDM Modules, 16 Slots
Option 53	Change Ethernet to Ethernet plus SFP Slot
Option 54	SFP Ethernet Module
Option 82	Chassis enabled for LNB Powering Products
Option 84	RF Monitoring for LNB Powering Products

Cabling Options

Option 40	Cabling for 4 Slots; 50 Ohm, SMA (f)
Option 40 Twin	Cabling for 4 Slots for Twin Modules; 50 Ohm, SMA (f)
Option 42	Cabling for 4 Slots; 75 Ohm, F (f)
Option 42 Twin	Cabling for 4 Slots for Twin Modules; 75 Ohm, F (f)
Option 43	Cabling for 4 Slots; 75 Ohm, BNC (f)
Option 43 Twin	Cabling for 4 Slots for Twin Modules; 75 Ohm, BNC (f)

1+1 Redundancy Options

Option 44/50/Rx	1+1 Rx Redundancy Kit; 10, 47...1006 MHz; 50 Ohm, SMA (f)
Option 44/50/Tx	1+1 Tx Redundancy Kit; 10, 47...1006 MHz; 50 Ohm, SMA (f)
Option 44/75/Rx	1+1 Rx Redundancy Kit; 10, 47...1006 MHz; 75 Ohm, F (f)
Option 44/75/Tx	1+1 Tx Redundancy Kit; 10, 47...1006 MHz; 75 Ohm, F (f)
Option 45/50/Rx	1+1 Rx Redundancy Kit; 850...2450 MHz; 50 Ohm, SMA (f)
Option 45/50/Tx	1+1 Tx Redundancy Kit; DC, 850...2450 MHz; 50 Ohm, SMA (f)
Option 45/75/Rx	1+1 Rx Redundancy Kit; 950...2150 MHz; 75 Ohm, F (f)
Option 45/75/Tx	1+1 Tx Redundancy Kit; DC, 950...2150 MHz; 75 Ohm, F (f)

N+1 Redundancy Options

■ Please specify **n** = 4, 8, 12, or 16

Option 46/75/n+1	n+1 Redundancy Kit; 47...1006 MHz; 75 Ohm, F (f)
Option 47/50/n+1	n+1 Redundancy Kit; DC, 850...2450 MHz; 50 Ohm, SMA (f)
Option 47/75/n+1	n+1 Redundancy Kit; DC, 950...2150 MHz; 75 Ohm, F (f)

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