

STRATUM LinX OA ACTIVE OPTICAL HUB FOR FTTB NETWORKS



- For FTTB networks with up to 64 nodes/segment
- Element of CWDM and DWDM networks
- Optional connection to monitoring system
- Indoor and outdoor versions are available

GENERAL DESCRIPTION

The STRATUM LinX OA active optical hub replaces the optical node when rebuilding a classical HFC system to FTTB. This device allows upstream wavelength multiplexing in case of single fiber bidirectional networks. Thanks to the ability of handling even 4 DWDM downstream channels and 4 CWDM upstream channels on a single fiber, the solution fits to the networks serving large areas with limited fiber availability. The built-in EDFA and the user defined configuration between 1x2 and 4x4 makes possible to change 32 to 64 house amplifiers to nodes with different segment sizes.

TECHNICAL SPECIFICATIONS

Forward path parameters

	LX-OA-xx-1x	LX-OA-xx-2x	LX-OA-xx-4x
Number of input DWDM channels	1	2	4
Handled DWDM channels	ITU 22, 24, 26, 28 *		
Input optical power range [dBm]	-3...10		
Output optical power per DWDM channel [dBm]	>5		
Noise figure [dB]	4		
Pump power leakage [dB]	<-30		
Output and input isolation [dB]	>30		

Reverse path parameters

	LX-OA-xx-x1	LX-OA-xx-x2	LX-OA-xx-x4
Number of optical inputs	1	2	4
Input wavelength range [nm]	1270...1610		
Input optical power range [dBm]	-10...3		
Equivalent input noise current [pA/√Hz]	4		
Output optical wavelength [nm]	1470, 1510, 1590, 1610 *		
Output optical power [mW]	4 (6 dBm)		
Relative intensity noise (RIN) [dB/Hz]	<-145		
Frequency range [MHz]	5...204		

Specifications are subject to change without notice!

General parameters

Optical connector

Power supply voltage [VAC]

Maximum power consumption (full configuration - LX-OA-xx-24) [W]

Screening factor [dB]

Degree of protection

Temperature range [°C]

Dimensions (die-cast / rack mounted) [mm]

Weight (die-cast / rack-mounted) [kg]

LX-OA-...-L

LX-OA-...-R

LC/APC

230±20% ~ 30...65, □ 35...90

13

80

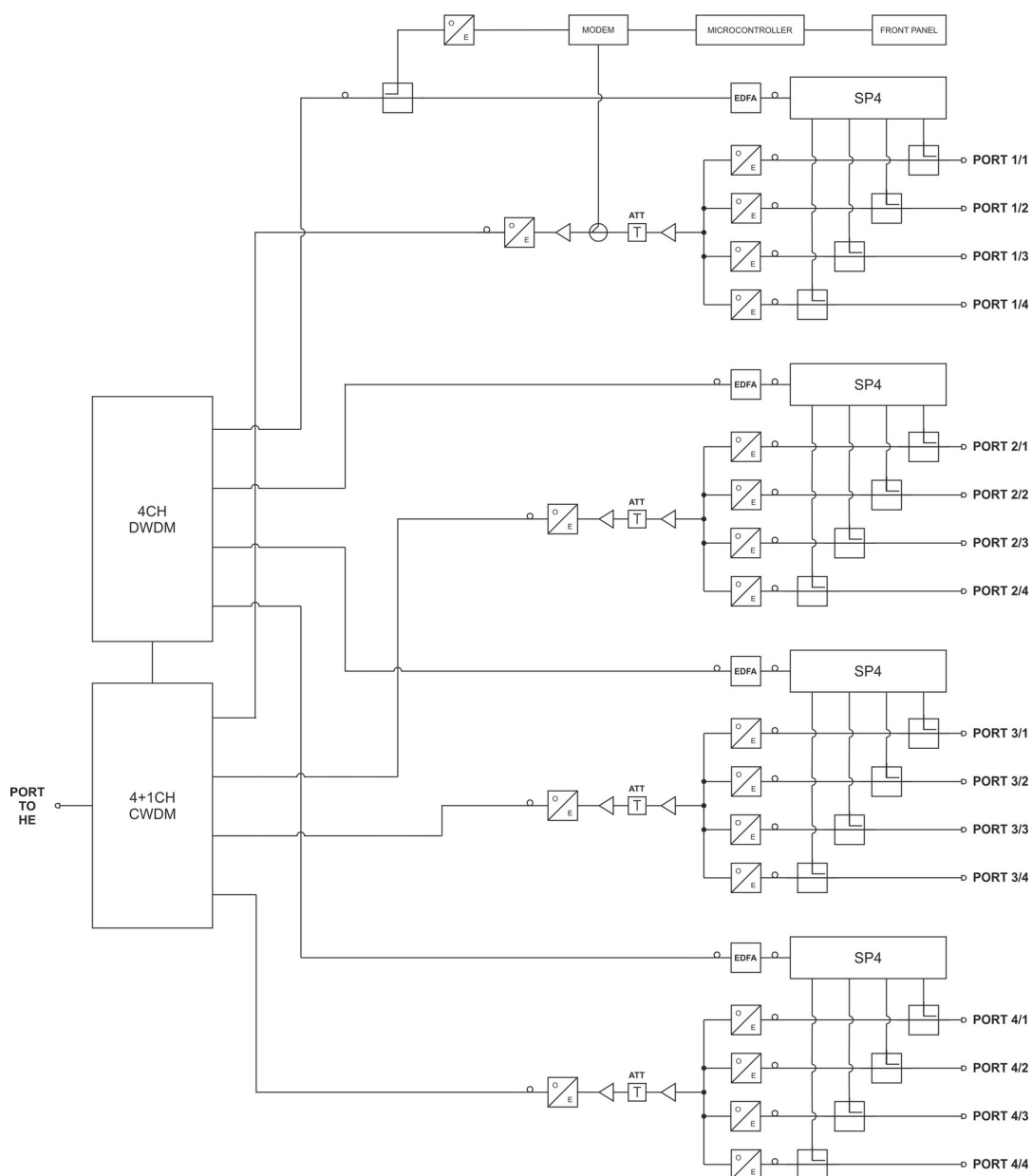
IP54 (only the die-cast housing!)

-20...+55

252x215x120 / 483x240x87

2.7 / 5.3

BLOCK DIAGRAM – FULL CONFIGURATION



Specifications are subject to change without notice!

ORDERING INFORMATION

L	X	-	O	A	-	X	X	-	X	X	-	X	X	X	X	-	X	X	-	X	-	L	A
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Type of housing	
DC	Outdoor die-cast
R1	Indoor rack mounted
R2	Rack w. built-in splitters

Number of FWD DWDM ch.	
1	1 DWDM channel
2	2 DWDM channels
4	4 DWDM channels

First FWD DWDM channel *	
22	ITU 22 (at 1, 2 or 4 FWD CH)
24	ITU 24 (at 1 or 2 FWD CH)
26	ITU 26 (at 1 or 2 FWD CH)
28	ITU 28 (at 1 FWD CH)

Powering	
L	Local
R	Remote

Number of opt. ports	
08	8 optical ports
16	16 optical ports

Number of REV CWDM ch.	
1	1 CWDM channel
2	2 CWDM channels
4	4 CWDM channels

First REV CWDM channel *	
47	1470 nm (at 1, 2 or 4 REV CH)
51	1510 nm (at 1 or 2 REV CH)
59	1590 nm (at 1 or 2 REV CH)
61	1610 nm (at 1 REV CH)

Option	Required modules	Ordering codes
Monitoring option	1pc NMT-EL transponder	NMT-EL

* In case of need other channels are also possible