

Specifications

Downstream incl. receiver module

Wavelength	1290-1600 nm
Opt. return loss	> 40 dB
Fiber	single mode 9/125 µm
Optical connector	S-version SC/APC (E2000 on request)
Output impedance	75 Ohm
Output return loss	> 20 dB (-1.5 dB / oct.)
Frequency range (determined by diplex filter)	47/85- 862 MHz
Opt. input level for controlled electrical output level	-5 to +3 dBm
Controlled output level range	
Out1	O MI=5% per channel 87 - 102 dBµV
Out 2,3	O MI=5% per channel 99 - 114 dBµV
Step size	0.1 dB
Equalizer range (adjustable), each output	0 - 15 dB
Step size	0.1 dB
Amplitude response (O-E)	< ± 0.75 dB
Equivalent noise input	< 6 pA /√Hz
Distortion products for CENELEC 42 Ch.	
Out2, Out3	114 dBµV, 6 dB slope
CSO	> 60 dB
CTB	> 60 dB
Out1	102 dBµV, 6 dB slope
CSO	> 64 dB
CTB	> 64 dB
RF test points	-20 dB

Upstream incl. transmitter module

Wavelength	
	LT 40 S - FP Laser 1310 nm
	LT 41 S 1310±20 nm
	LT 45 S / 1430 1430±3 nm
	LT 45 S / 1450 1450±3 nm
	LT 45 S / 1470 1470±3 nm
	LT 45 S / 1490 1490±3 nm
	LT 45 S / 1510 1510±3 nm
	LT 45 S / 1530 1530±3 nm
	LT 45 S / 1550 1550±3 nm
	LT 45 S / 1570 1570±3 nm
	LT 45 S / 1590 1590±3 nm
	LT 45 S / 1610 1610±3 nm
Opt. output power	3 dBm
Frequency range	10 - 30/65 MHz
Broadband RF-Input	10 - 300 MHz (106 dBµV = 5% OMI)
Input return loss	> 20 dB (-1,5 dB / oct.)
RIN	< -145 dB/Hz
- LT 40	< - 135 dB/Hz
Nominal input level	75 dBµV
O MI control range	3 - 10% @ 75 dBµV input
Step size	1 %
Ingress control switch att. ICS 1,2,3	0 / 8 / >45 dB
RF test points upstream, downstream	-20 dB
RF test points laser in	75 dBµV@5% OMI
Reference pilot	3.16% OMI

Reference pilot frequencies

LT 40, 41S/1310	- 6.5 MHz;	LT 45 S/1510	- 6.6 MHz;
LT 45 S /1430	- 5.8 MHz;	LT 45 S /1530	- 6.8 MHz;
LT 45 S /1450	- 6.0 MHz;	LT 45 S /1550	- 7.0 MHz;
LT 45 S /1470	- 6.2 MHz;	LT 45 S /1570	- 7.2 MHz;
LT 45 S /1490	- 6.4 MHz;	LT 45 S /1590	- 7.4 MHz;
		LT 45 S /1610	- 7.6 MHz;

General specifications

RF connectors	PG11
Supply voltage	LR 43/S 180-265 VAC
	LR 63/S 27-65 VAC

Power consumption typ. incl. 1 x LR 40S, LT 41S	< 45 W
max.	53 W

Remote power feed	< 8 A
Operating temperature	-20°C... +50°C
EMC	EN 50083-2
Protection class	IP 66
Dimensions	288 x 125 x 302 mm

Downstream

Monitoring:

- opt. input level
- attenuator setting
- equalizer out 1,2,3 setting
- redundancy switch position
- receiver configuration
- pilot level

Configuration:

- attenuation out 1, 2, 3 0-15 dB
- equalizer out 1, 2, 3 0-15 dB
- redundancy mode auto / manual
- redundancy switch position rec.1 / rec. 2
- AGC control on / off
- alarm / warning thresholds

Upstream

Monitoring:

- opt. output level
- temperature
- transmitter configuration
- redundancy / clustering switch position
- ICS position

Configuration:

- laser on / off
- OMI 3 -10%
- ICS1, ICS2, ICS3 0 / 8 / >45 dB
- redundancy / clustering switch position
- alarm / warning thresholds

Alarms / Warnings:

- optical input power too high / too low
- optical transmitting power too high / too low
- temperature too high / too low
- AGC range limit
- pilot level too high / too low

All alarm / warning thresholds are variable



Product Information

LR 43 / S Redundant Optical Node, local feed

LR 63 / S Redundant Optical Node, remote feed



WISI FIBER LINE

- Redundant Node with three active outputs
- Integrated splice box
- Plug-in optical transmitter and receiver modules (2 each)
- All settings (level, slope etc.) by WISI OK41A handset or NMS if a HMS transponder is used
- Alignment without signal interruption
- Interface for NMS functionality
- Electronic upstream configuration redundancy / clustering
- ICS switch for each input
- Automatic level control (ALC) via optical input power or pilot controlled VX 58



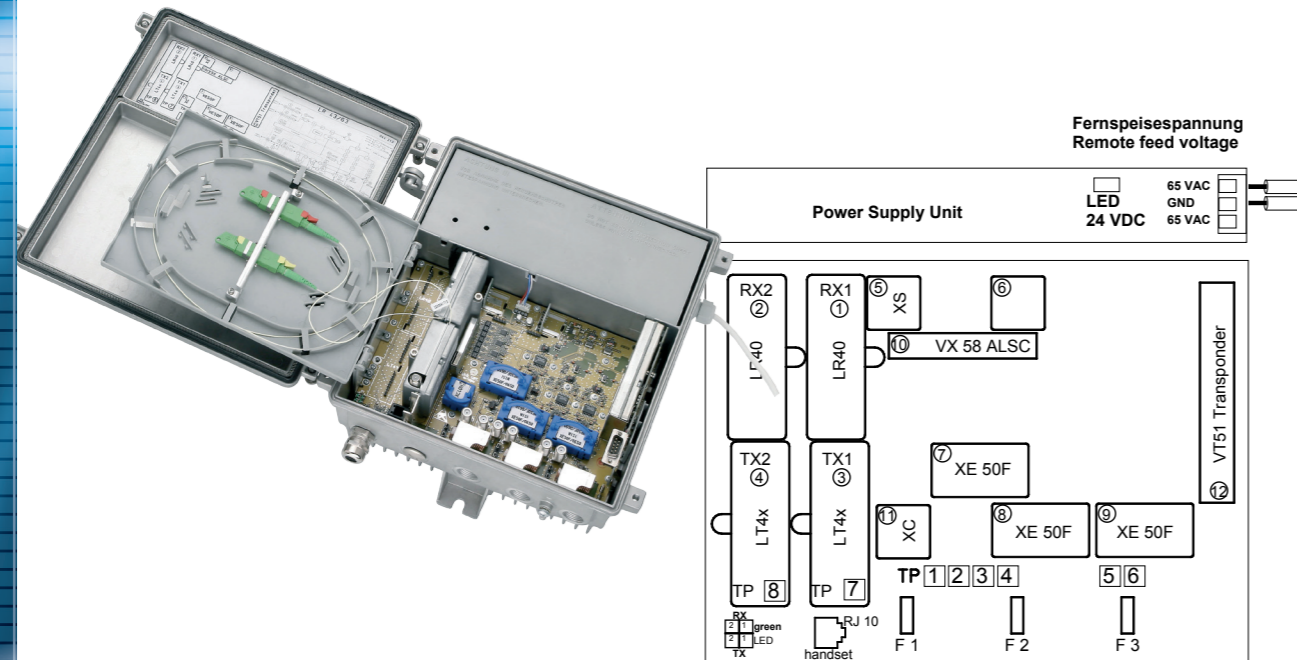
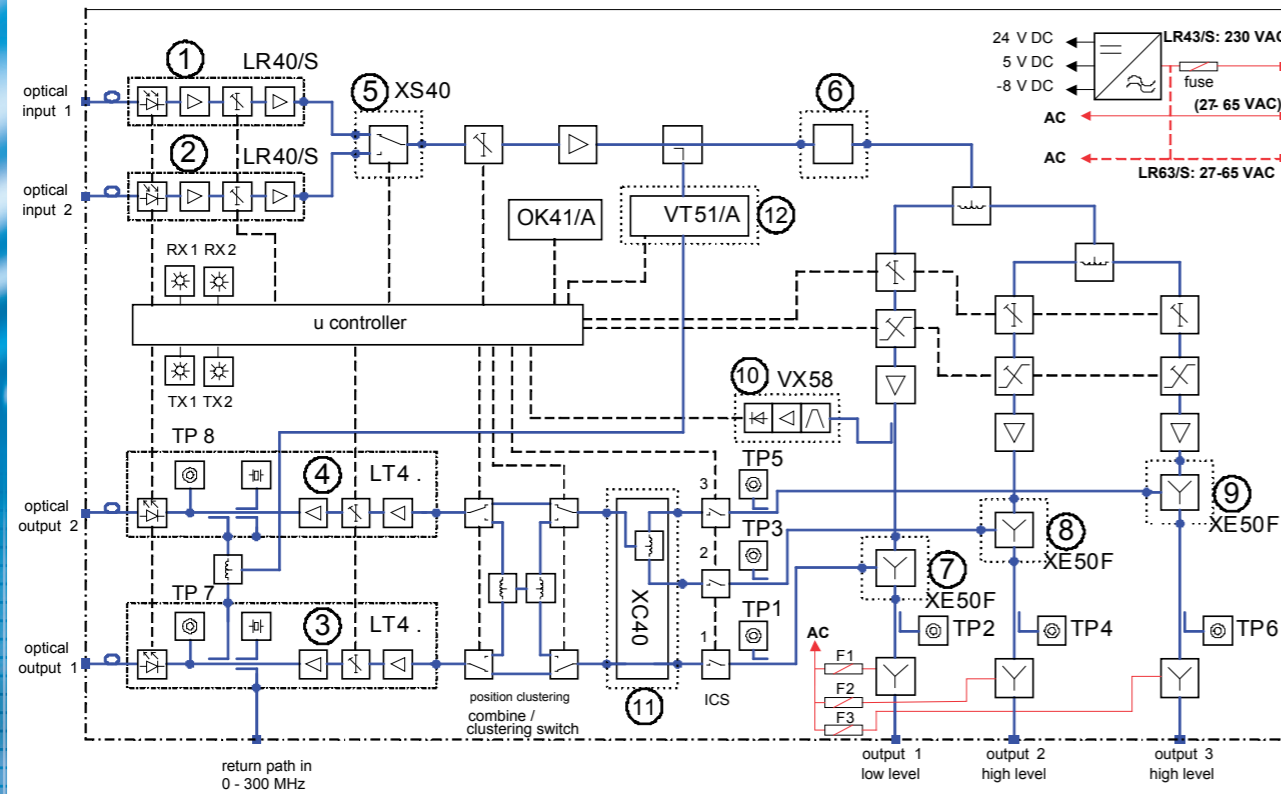
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LR 43 / S Redundant Optical Node, local feed
 LR 63 / S Redundant Optical Node, remote feed

Block diagram



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LR 43 / S Redundant Optical Node, local feed
 LR 63 / S Redundant Optical Node, remote feed

Ordering information

Slot No.	Type	LR 43 / LR 63 / S factory config.	Accessories Options
(1)	LR 40S opt. Rx	X	—
(2)	LR 40S opt. Rx	—	X
(3)	LT 40S FP laser	—	X
or	LT 41S 1310 nm opt. Tx	—	X
or	LT 45S 1510 nm opt. Tx	—	X
(4)	LT 40S FP laser	—	X
or	LT 41S 1310 nm opt. Tx	—	X
or	LT 45S 1510 nm opt. Tx	—	X
(5)	XS 40 switch	Jumper	X
(6)	Universal plug-in	Jumper	X
(7)	XE 50F diplexer	—	X
(8)	XE 50F diplexer	—	X
(9)	XE 50F diplexer	—	X
(10)	VX 58 ALSC mod.	—	X
(11)	XC 40 config. modul	—	X
(12)	VT 51 transponder	—	X

Accessory

OK41 / 41A handset

Note:

If LR 40S (2) is ordered, also one XS 40 (5) is required.

If LT 4... S(3) / (4) is ordered, also one XC 40 (11) is required.

Attention: XE 50F is not compatible with XE 50!!

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