

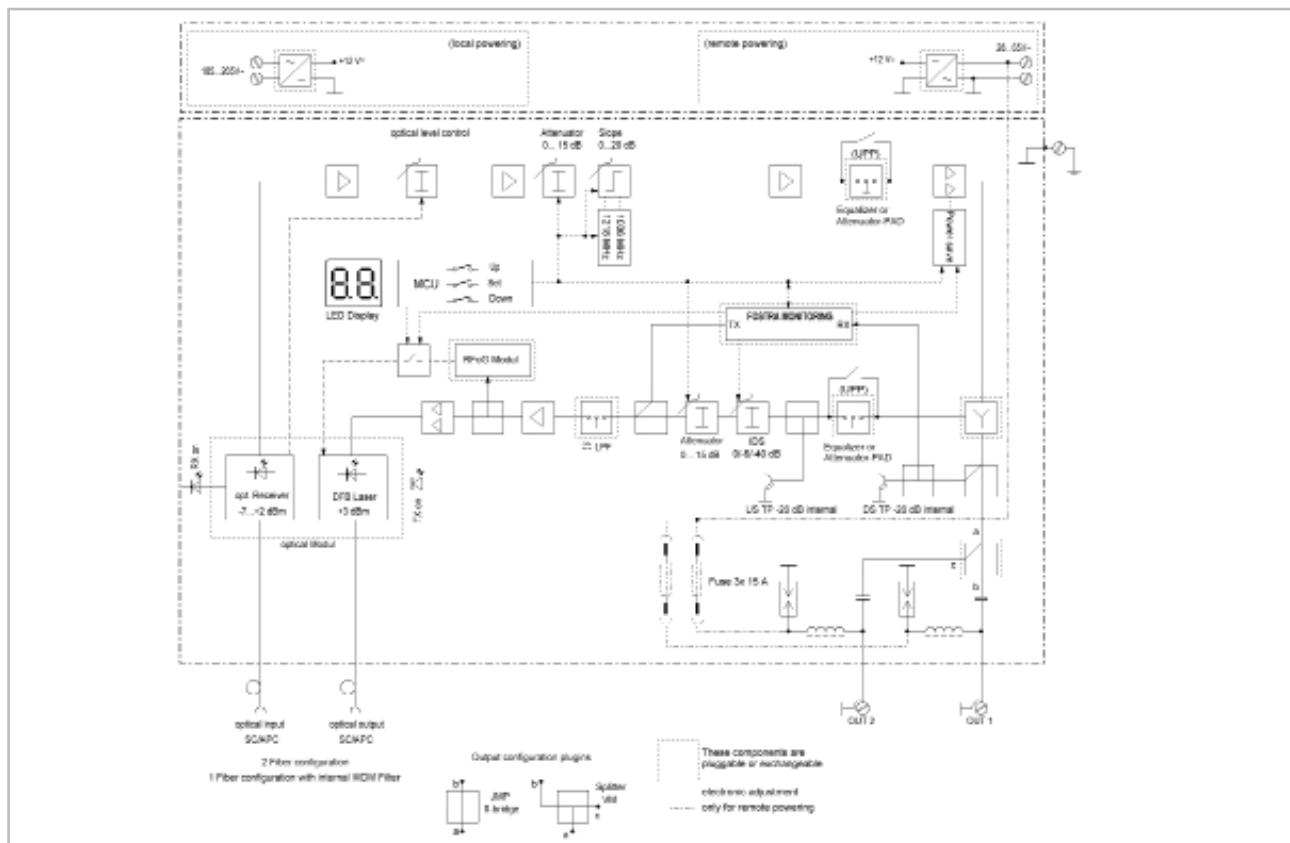
# MEDIUM FIBRE NODE FOR HFC / FTTH

**A Fibre Node for the modernisation of HFC-networks  
Especially suitable for FTTLA in 1.2 GHz HFC-networks and  
reduction of the coaxial cluster**



- Compact optical receiver with modular return way
- High RF output level and dynamic range, 2 outputs
- Low noise impedance receiver
- Low noise DFB- laser in burst or CW mode operation
- Optical level control (OLC) based on optical input power
- 7-Segment display for various monitoring options and easy control
- Optional remote power
- Internal fibre splice management
- Return way transmitter available in CWDM-grid (1270 - 1610nm)

Type	ONC 1200	ONCR 1200	ONCR 12xx F	ONCR 12xx BFD
Description	optical receiver 85...1218 MHz 114 dBµV RF-output level	optical receiver 85...1218 MHz 114 dBµV RF-output level	DS: selectable US: CWDM 85...1218 MHz 114 dBµV RF-output level	DS: selectable US: CWDM 85...1218 MHz 114 dBµV RF-output level controllable



Type		ONC(R) 1200, ONCR 12xx F, ONCR 12xx BFD		
Applications		HFC, FTTC/FTTLA		
Compact die-cast housing	mm	225 x 195 x 95 / IP 65, out-door		
Fibre connectors (internal)		SC/APC (internal fibre slice management)		
Connectors		PG 11-RF output , PG 13.5 (opt. fibre feed-through)		
Mains feeding	V~/W	185...265 / 20		
Remote feeding	V~	28...65 / 0.67 A @ 30 VAC, 10 A		
Operating temperature	°C	-20...+55		
OLC	dBm	-7...+1 (RF ouput ±1dB)		
Adjustment elements	dB	0...15 (electronically adjustable in 1dB steps, 7-segm.display+micro)		
Return laser module		various available (3,6dBm DFB)		
RF outputs		1 od. 2 (with 2-way splitter or tab module 10 od. 20 dB)		
Downstream	Optical wavelength	nm	1260 ... 1620	
	Optical input power	dBm	-8...+2	
	RF return loss	dB	≥ 20 -1.75/Okt. (65 - 1218 MHz) ≥ 20 -2/Okt. (85 - 1218 MHz) ≥ 20 -3/Okt. (204-1218 MHz) min 12 @ 1218 MHz	
	Frequency range	MHz	85...1218 MHz	
	Frequency response	dB	± 0.7 max. ±1	
	RF output power	dBμV	114 CENELEC, flat, CTB/CSO >60dB	
	Gain limited output level	dBμV	116	
	C/N	dBc	50 @ -3 dBm, OMI 4%	
	RF slope	dB	0...15 dB (electronically adjustable in 1dB steps)	
	RF level adjustment	dB	0...15 dB (electronically adjustable in 1dB steps)	
	RF test point	dB	-20 (internal)	
	Monitoring optical input	dBm	green LED on: input -8...+2, flashing when > +2	
	Upstream	Optical input power		7-segment display, power meter function
		Laser wavelength	nm	1270 - 1610
Optical Power		dBm	3	
Optical return loss		dB	60	
Frequency range		MHz	5...65/85/204 (Diplexer RLK 565-1 / 585-1 / 5200)	
RF input level (CWDM)		dBμV	65, OMI 7% @ 0 dB attn	
RF input level attenuator		dB	0...15 (electronically adjustable in 1 dB steps)	
RF test point	dB	-20 (internal)		

## VERSIONS

ONC R 12 xx BFD - xx - x - xx

Powering (V~)	Frequency range (MHz)	US-wavelength	Laser operation, monitoring	DS-wavelength	Number of Fibres	Diplexer (MHz)	
-: local powering 230 V~	12: up to 1218 MHz	27: 1270 nm	B: burst mode and continuous mode	15: 1550 nm	1: one fiber for US and DS	65: RLK 565-1 (5-65/85)	
		29: 1290 nm					10: 1260-1620 nm
R: remote powering 28-65 V~			31: 1310 nm	F: FSK-monitoring		2: one fiber for US and one fiber for DS	85: RLK 585-1 (5-85/105)
			33: 1330 nm				
			35: 1350 nm	D: Docsis			20: RLK 5200 (5-204/ 258)
			37: 1370 nm				
			39: 1390 nm				
			41: 1410 nm				
			43: 1430 nm				
			45: 1450 nm				
			47: 1470 nm				
			49: 1490 nm				
			51: 1510 nm				
			53: 1530 nm				
			55: 1550 nm				
			57: 1570 nm				
	59: 1590 nm						
	61: 1610 nm						