

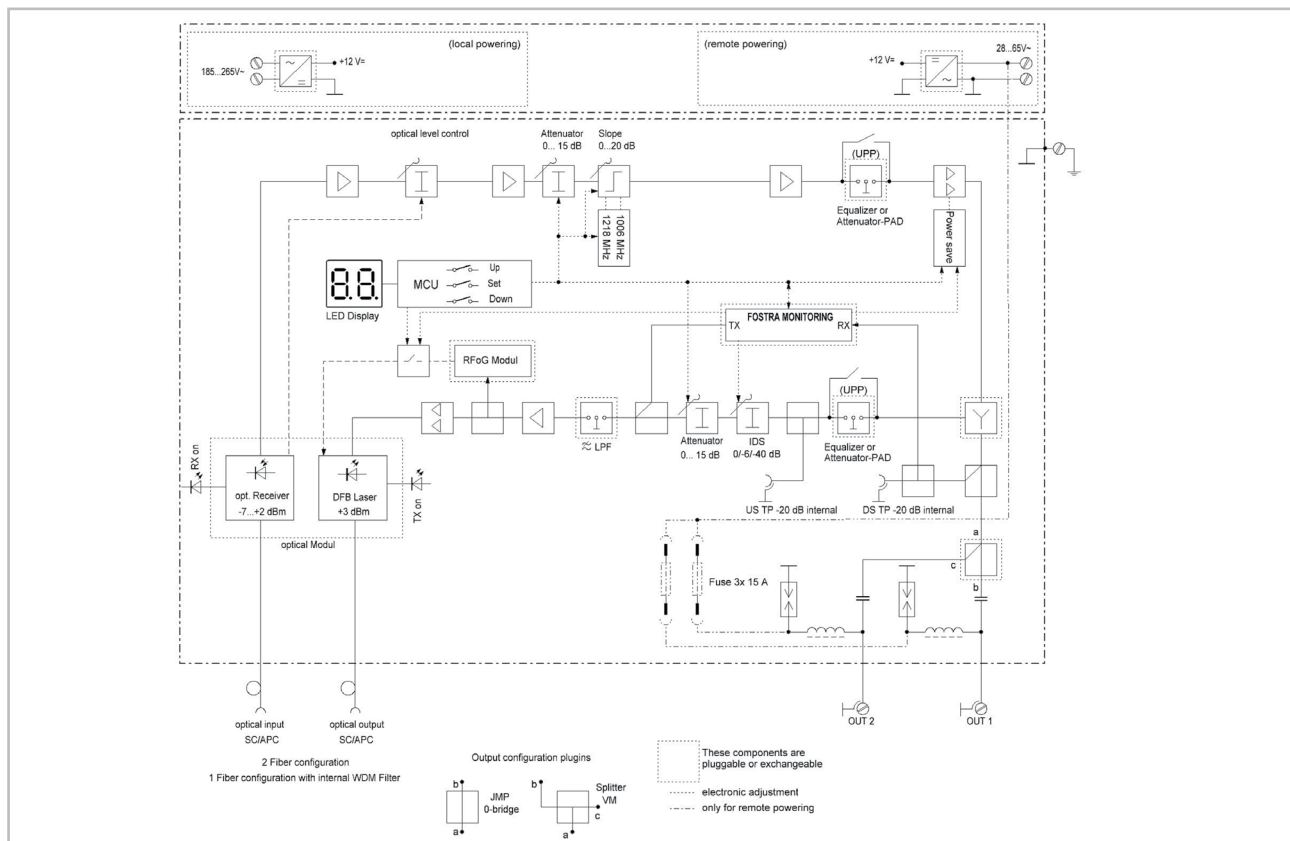
MEDIUM FIBRE NODE FOR HFC / FTTx

**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 node with modular return way laser 1x1
- 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 dB μ V RF-output level	Optical receiver 85...1218 MHz 114 dB μ V RF-output level	DS: selectable US: CWDM 85...1218 MHz 114 dB μ V RF-output level	DS: selectable US: CWDM 85...1218 MHz 114 dB μ V 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 (optical 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 output ±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 or 2 (with 2-way splitter or tab module 10 or 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 8% @ 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 fibre for US and DS	65: RLK 565-1 (5-65/85)	
		29: 1290 nm					10: 1260-1620 nm
		31: 1310 nm	F: FSK-monitoring D: Docsis			2: one fibre for US and one fibre for DS	85: RLK 585-1 (5-85/105) 20: RLK 5200 (5-204/ 258)
R: remote powering 28-65 V~		33: 1330 nm					
		35: 1350 nm					
		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						

Please use the following item numbers when ordering:

Type	Item No.	Description
ONC 1200	57002895	Optical compact receiver, 5-1200 MHz, 230 V~
ONC 1231 F-15-1-65	57003236	1310 in US, 1540-1565 in DS, 230 V~, 85-1218 MHz, 1 fibre, Fostra-F prepared
ONC 1231 F-10-2-65	57003242	1310 in US, 1260-1620 in DS, 230 V~, 85-1218 MHz, 2 fibres, Fostra-F prepared
ONC 1261 F-10-2-65	57003172	1610 in US, 1260-1620 in DS, 230 V~, 85-1218 MHz, 2 fibres, Fostra-F prepared
ONC 1261 F-10-2-85	57003173	1610 in US, 1260-1620 in DS, 230 V~, 105-1218 MHz, 2 fibres, Fostra-F prepared
ONC 1261 F-10-2-20	57003174	1610 in US, 1260-1620 in DS, 230 V~, 258-1218 MHz, 2 fibres, Fostra-F prepared
ONCR 1200	57002896	Optical compact receiver, 5-1200 MHz, 28-65 V~
ONCR 1227 F 15-1-85	57002897	1270 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1229 F-15-1-85	57002898	1290 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1231 F-15-1-85	57002899	1310 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1233 F-15-1-85	57002900	1330 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1235 F-15-1-85	57002901	1350 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1237 F-15-1-85	57002902	1370 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1239 F-15-1-85	57002903	1390 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1241 F-15-1-85	57002904	1410 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1243 F-15-1-85	57002905	1430 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1245 F-15-1-85	57002906	1450 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1247 F-15-1-85	57002907	1470 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1249 F-15-1-85	57002908	1490 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1251 F-15-1-85	57002909	1510 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1253 F-15-1-85	57002910	1530 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1257 F-15-1-85	57002912	1570 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1259 F-15-1-85	57002913	1590 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1261 F-15-1-85	57002914	1610 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1241 F-10-1-85	57003211	1410 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1243 F-10-1-85	57003198	1430 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1245 F-10-1-85	57003199	1450 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1247 F-10-1-85	57003200	1470 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1249 F-10-1-85	57003201	1490 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1251 F-10-1-85	57003202	1510 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1253 F-10-1-85	57003203	1530 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1255 F-10-1-85	57003204	1550 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1257 F-10-1-85	57003205	1570 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1259 F-10-1-85	57003206	1590 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1261 F-10-1-85	57003207	1610 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, Fostra-F prepared
ONCR 1231 F-10-2-65	57003241	1310 in US, 1260-1620 in DS, 28-65 V~, 85-1218 MHz, 2 fibres, Fostra-F prepared
ONCR 1261 F-10-2-65	57003169	1610 in US, 1260-1620 in DS, 28-65 V~, 85-1218 MHz, 2 fibres, Fostra-F prepared
ONCR 1261 F-10-2-85	57003170	1610 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 2 fibres, Fostra-F prepared
ONCR 1261 F-10-2-20	57003171	1610 in US, 1260-1620 in DS, 28-65 V~, 258-1218 MHz, 2 fibres, Fostra-F prepared