

MEDIUM FIBRE NODE FOR HFC / FTTx

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

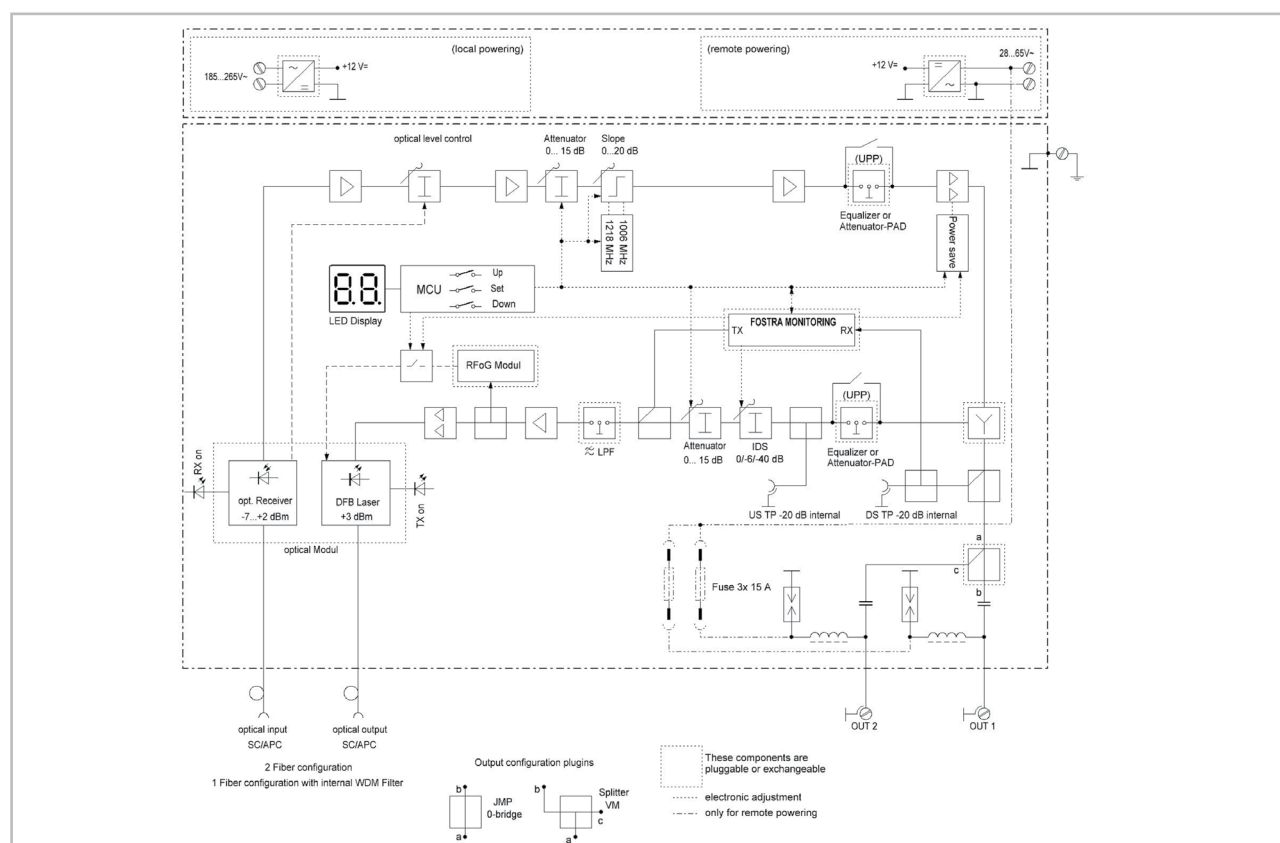
- Compact node with modular return way laser 1x1
- High RF output level and dynamic range, 2 outputs
- Low noise impedance receiver
- Low noise DFB- laser in burst or CW mode operation
- Optical level control (OLC) based on optical input power
- 7-Segment display for various monitoring options and easy control
- Optional remote power
- Internal fibre splice management
- Return way transmitter available in CWDM-grid (1270 - 1610nm)



Type	ONC 1200	ONCR 1200	ONC (R) 12xx F	ONC (R) 12xx F ECO
Description	Optical receiver 85...1218 MHz	Optical receiver 85...1218 MHz	DS: selectable US: CWDM 85...1218 MHz	DS: selectable US: CWDM 85...1218 MHz
	RF-output level	RF-output level	RF-output level	RF-output level
CENELEC* ¹	114 dBμV	114 dBμV	114 dBμV	111 dBμV
Digital* ²	107 dBμV	107 dBμV	107dBμV	105 dBμV

*¹ CENELEC : CTB,CSO > 60 dB

*² Digital: EN 60728-3,119 CH, 262-1214MHz, flat



Type			ONC(R) 1200, ONCR 12xx F,
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	200...240 (50-60 Hz) / 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 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 level (CENELEC) *1	dBµV	114
	RF output level (digital) *2	dBµV	109
	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)

*1 CENELEC : CTB,CSO > 60 dB

*2 Digital: EN 60728-3,119 CH, 262-1214MHz, flat

VERSIONS

ONC R 12 xx F - xx - x - xx - ECO

Powering (V~)	Frequency range (MHz)	US-wavelength	Laser operation, monitoring	DS-wavelength	Number of fibres	Diplexer (MHz)	Power consumption
-: local powering 200 - 240 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)	- : 17 W
		29: 1290 nm		10: 1260-1620 nm			ECO: 11 W
		31: 1310 nm	F: FSK-monitoring		2: one fibre for US and one fibre for DS	85: RLK 585-1 (5-85/105)	
R: remote powering 28-65 V~		33: 1330 nm				20: RLK 5200 (5-204/ 258)	
		35: 1350 nm	D: Docsis				
		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, FOSTR-A-F prepared
ONC 1231 F-10-2-65	57003242	1310 in US, 1260-1620 in DS, 230 V~, 85-1218 MHz, 2 fibres, FOSTR-A-F prepared
ONC 1261 F-10-2-65	57003172	1610 in US, 1260-1620 in DS, 230 V~, 85-1218 MHz, 2 fibres, FOSTR-A-F prepared
ONC 1261 F-10-2-85	57003173	1610 in US, 1260-1620 in DS, 230 V~, 105-1218 MHz, 2 fibres, FOSTR-A-F prepared
ONC 1261 F-10-2-20	57003174	1610 in US, 1260-1620 in DS, 230 V~, 258-1218 MHz, 2 fibres, FOSTR-A-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, FOSTR-A-F prepared
ONCR 1229 F-15-1-85	57002898	1290 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1231 F-15-1-85	57002899	1310 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1233 F-15-1-85	57002900	1330 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1235 F-15-1-85	57002901	1350 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1237 F-15-1-85	57002902	1370 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1239 F-15-1-85	57002903	1390 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1241 F-15-1-85	57002904	1410 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1243 F-15-1-85	57002905	1430 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1245 F-15-1-85	57002906	1450 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1247 F-15-1-85	57002907	1470 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1249 F-15-1-85	57002908	1490 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1251 F-15-1-85	57002909	1510 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1253 F-15-1-85	57002910	1530 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1257 F-15-1-85	57002912	1570 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1259 F-15-1-85	57002913	1590 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1261 F-15-1-85	57002914	1610 in US, 1540-1565 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1241 F-10-1-85	57003211	1410 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1243 F-10-1-85	57003198	1430 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1245 F-10-1-85	57003199	1450 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1247 F-10-1-85	57003200	1470 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1249 F-10-1-85	57003201	1490 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1251 F-10-1-85	57003202	1510 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1253 F-10-1-85	57003203	1530 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1255 F-10-1-85	57003204	1550 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1257 F-10-1-85	57003205	1570 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1259 F-10-1-85	57003206	1590 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1261 F-10-1-85	57003207	1610 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 1 fibre, FOSTR-A-F prepared
ONCR 1231 F-10-2-65	57003241	1310 in US, 1260-1620 in DS, 28-65 V~, 85-1218 MHz, 2 fibres, FOSTR-A-F prepared
ONCR 1261 F-10-2-65	57003169	1610 in US, 1260-1620 in DS, 28-65 V~, 85-1218 MHz, 2 fibres, FOSTR-A-F prepared
ONCR 1261 F-10-2-85	57003170	1610 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 2 fibres, FOSTR-A-F prepared
ONCR 1261 F-10-2-20	57003171	1610 in US, 1260-1620 in DS, 28-65 V~, 258-1218 MHz, 2 fibres, FOSTR-A-F prepared
ONCR 1261 F-15-1-65-ECO	57004197	1610 in US, 1540-1620 in DS, 28-65 V~, 85-1218 MHz, 1 fibres, FOSTR-A-F prepared, ECO mode
ONCR 1261 F-10-2-85-ECO	57004217	1610 in US, 1260-1620 in DS, 28-65 V~, 105-1218 MHz, 2 fibres, FOSTR-A-F prepared, ECO mode