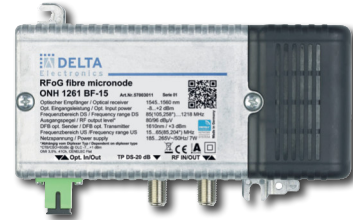


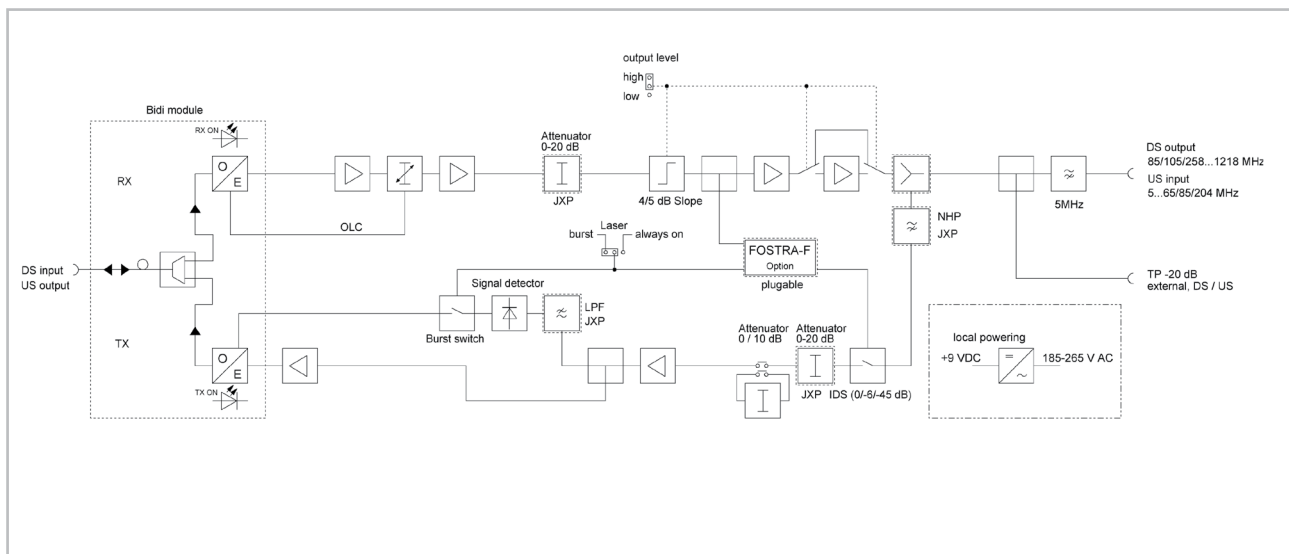
## RFoG MICRO NODE

### Micronode for RFoG networks, FTTH/FTTB applications

- || Extremely low noise optical receiver
- || Constant RF output level at wide optical input power range
- || OLC function based on optical input power
- || Interstage attenuator and slope
- || Optical input power indicator and monitoring LED's
- || RF input and output test point
- || Ultra low noise DFB- laser with isolator in burst mode operation
- || Internal WDM filter US/DS wavelength for RFoG applications
- || Upstream available from 1270nm to 1610nm at CWDM grid to avoid OBI
- || Remote controllable in DS & US due to FOSTRA-F receiver module



Type	ONH 1200	ONH (R) 12xx BSF-xx	ONH 12xx BF-xx	ONH 12xx B1F-xx
Description	Optical Micro-Receiver, RX:1270-1620nm, 40-1218 MHz, (without return path)	DS: 1550nm US: CWDM	DS: 1550nm US: CWDM	DS: 1550nm US: CWDM
CENELEC*1	96 dBµV RF-Output level	80 dBµV RF-Output level	80/96 dBµV RF-Output level	99 dBµV RF-Output level
Digital*2	93 dBµV RF-Output level	78 dBµV RF-Output level	78/93 dBµV RF-Output level	97,5 dBµV RF-Output level



Type		ONH 12xx BSF-xx	ONH 12xx BF-xx	ONH 12xx B1F-xx	
Applications			FTTH, FTTB, DOCSIS-PON, RFoG		
Compact die-cast housing	mm		153 x 95 x 53 / IP 20, In-door		
Weight	kg		0.7		
Fibre connectors			SC/APC		
RF connectors			F-female		
Mains feeding	V~/ W	200...240 (50-60 Hz) / < 4.6	200...240 (50-60 Hz) / < 7,3		
Operating temperature	°C		-20...+55, free convection		
Adjustment elements			PAD and Jumper		
Internal WDM (Tx / Rx)	nm		DS / US		
Downstream	Optical wavelength	nm	1540...1565		
	Optical input power	dBm	-8...+1		
	Frequency range	MHz	85...1218		
	Frequency response	dB	± 0.75, max. ± 1		
	Optical level control (OLC)	dBm		-7...+1 (RF-output level ± 1 dB)	
	RF output level (CENELEC) *1	dBµV	80	80/96 (selectable)	99
	RF output level (digital) *2	dBµV	78	78/93 (selectable)	97,5
	C/N	dBc		50 @ -3 dBm, OMI 4%	
	RF level attenuator	dB		0...20 (PAD, 1 dB steps)	
	RF slope	dB		0 / 4 / 5 (switchable by jumper )	
	Test point RF output	dB		-20 (F-female, external)	
	Monitoring optical input	dBm		Green LED on: input -8...+2, flashing when > +2	
Upstream	DFB-laser / optical power	dBm	3		
	Laser operation		Burst Mode (Laser "Delay-Time" ≤ 0,8 µsec) SCTE compliant		
	RF input dynamic range	dBµV		61...91 ("Laser ON"@ Min. input RF-Level 67 dBµV)	
	Frequency range	MHz		5...204	
	OMI per channel			8% @ 70 dBµV	
RF input level attenuator	dB		0...20 (PAD, 1 dB steps), 0 / 10 dB Jumper Att.		
Monitoring	HEC 2191 Controller		FSK-TX, 868 MHz		
	FOSTRA F Control module		FSK Receiver RX : 868 MHz		

\*1 CENELEC : CTB,CSO > 60 dB

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

VERSIONS

ONH R 12 xx BxF - xx - xx

SDU 1/2 (single dwelling unit)

Powering (V~)	Frequency range (MHz)	US-wavelength	Laser operation, monitoring	DS-wavelength	Diplexer (MHz)	FOSTRA F
-: Local powering 200 - 240 V~	12: Up to 1218 MHz	27: 1270 nm	B: Burst and Continuous-Mode  1: 99 dBμV*1 / 97,5 dBμV*2 _: 96 dBμV*1 / 93 dBμV*2 S: 80 dBμV*1 / 78 dBμV*2  F: FSK-monitoring prepared	15: 1550 nm	65: 565-1 (5-65/85) 85: 585-1 (5-85/105) 20: 5200 (5-204/258)	-:  F: integrated FOSTRA F module  FT: integrated FOSTRA F module tune-able
R: Remote powering 28-65 V~		29: 1290 nm				
		31: 1310 nm				
		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				
		57: 1570 nm				
		59: 1590 nm				
	61: 1610 nm					

\*1 CENELEC : CTB,CSO > 60 dB

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

Please use the following item numbers when ordering:

Type	Item No.	Description
ONH 1200	57003016	Optical micro node 96 dBμV, 5-1218 MHz
ONH 1237 BSF-15-20	57003263	1370 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1239 BSF-15-20	57003264	1390 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1241 BSF-15-20	57003214	1410 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1243 BSF-15-20	57003215	1430 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1245 BSF-15-20	57003216	1450 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1247 BSF-15-20	57003217	1470 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1249 BSF-15-20	57003218	1490 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1251 BSF-15-20	57003219	1510 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1253 BSF-15-20	57003220	1530 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1257 BSF-15-20	57003221	1570 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1259 BSF-15-20	57003222	1590 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1261 BSF-15-20	57003105	1610 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1261 BSF-15-65	57003104	1610 in US, 1540-1565 in DS, 230 V~, 85-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1261 BSF-15-85	57003033	1610 in US, 1540-1565 in DS, 230 V~, 105-1218 MHz, FOSTRA-F prepared, 80 dBμV
ONH 1261 BSF-15-65/FOSTRA	57003106	1610 in US, 1540-1565 in DS, 230 V~, 85-1218 MHz, incl. FOSTRA-F module, 80 dBμV
ONH 1261 BSF-15-85/FOSTRA	57003107	1610 in US, 1540-1565 in DS, 230 V~, 105-1218 MHz, incl. FOSTRA-F module, 80 dBμV
ONH 1261 BSF-15-20/FOSTRA	57003108	1610 in US, 1540-1565 in DS, 230 V~, 258-1218 MHz, incl. FOSTRA-F module, 80 dBμV
ONH 1227 BF-15-85	57002995	1270 in US, 1540-1565 in DS, 230 V~, 105-1218 MHz, FOSTRA-F prepared, 96dBμV
ONH 1229 BF-15-85	57002996	1290 in US, 1540-1565 in DS, 230 V~, 105-1218 MHz, FOSTRA-F prepared, 96dBμV

