

Optical parameters

Wavelength	1100 – 1600 nm
Optical AGC range	-8 – 2 dBm
Equivalent input noise current	< 5.5 pA / √Hz

RF Parameters

Forward Channel

Bandwidth	85 / 110 / 260 – 1006 MHz
Gain limited output level ¹	112 ± 1 dBμV
Flatness ²	± 1 dB
Slope ³	± 1 dB
Output level @ 862 MHz ⁴ :	
CTB ≤ -60 dBc	110 dBμV
CSO ≤ -60 dBc	112 dBμV
CNR ⁵	51.5 dBc
Interstage attenuator (A1)	0 – 20 dB
Interstage equalizer (E1)	0 / 9 / 12 dB

Reverse Channel

Bandwidth	5 – 65 / 85 / 200 MHz
Slope	± 1 dB
Reverse attenuator (A2)	0 – 20 dB

Burst Mode

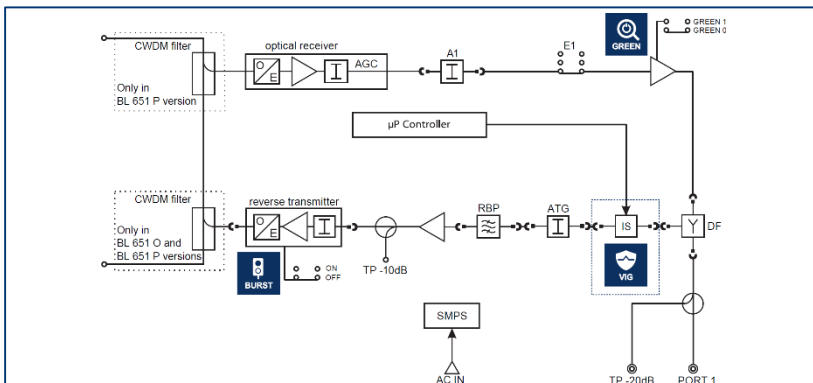
RF input threshold ⁶	75 ± 0.5 dBμV
Optical output power, RF > input threshold ⁷	3 ± 0.5 dBm
Optical output power, RF < input threshold	OFF
Laser rise time	< 1 μs
Laser fall time	< 1 μs

Others

Return loss ⁸	≥ 18 dB
Directional testpoints FWD (REV)	-20 ± 0.75 dB (-10 ± 0.75 dB)
Voltage range:	
remote powering	30 – 65 V AC
mains powering	230 ± 10% V AC
Power consumption ⁹	< 10.5 W
Operation temperature range	-20 – 60 °C
Optical connectors ¹⁰	SC / APC
Connectors	2 x F
Protection class	IP 42
Dimensions (W x L x H) ¹¹	156 x 126 x 74 mm
Weight	1.5 kg

Available versions

BOOSTRAL 651	mains powering, one fiber
BOOSTRAL 651	remote powering, one fiber
BOOSTRAL 651	mains powering, two fibers
BOOSTRAL 651	remote powering, two fibers
BOOSTRAL 651 259M P	mains powering, xPON
BOOSTRAL 651 259E P	remote powering, xPON



1 GHz technology

An extended bandwidth in downstream up to 1 GHz



200 MHz technology

A possibility of extending bandwidth in upstream up to 200 MHz



FTTB (Fiber To The Building) design

To be used in a modern FTTH architecture



GREEN mode – Intelligent Power Consumption

A significant reduction of power use thanks to optimization of its consumption



VIG (VECTOR INGRESS GUARD) system compliant

Verification and elimination of the source of ingress in the network



BURST mode

A laser lifetime significantly extended; noise reduction; reduced energy consumption



Low Noise Receiver

CAPEX optimization by reducing the number of the required active devices



xPON port

A flexible solution to be used in the scenarios combined with xPON networks

1. 3.25% OMI/channel; one carrier; Pin = -8 dBm; wavelength 1310 nm; AGC = ON;
 2. ± 1 dB up to 862 MHz; ± 1.5 dB up to 1 GHz
 3. Measured between 10 MHz above roll-off of DF and 1006 MHz; E1 = 0 dB
 4. With accordance to EN 50083-3, slope 12 dB from 40 MHz to 1 GHz; CENELEC 42; typ. value
 5. Noise BW = 4.75, Pin = -3 dBm, RF output level 110 dBμV; AGC = OFF, A1 = A2 = E1 = 0
 6. With 5 dB reverse ATG
 7. REV Tx 1310 FP 0 dBm
 8. 18 dB for 7 MHz ≤ f ≤ 40 MHz, 18 dB -1.5 dB/oct for f > 40 MHz, but ≤ 11 dB
 9. Sinus 30 V AC; with REV Tx and FWD Rx
 10. Other on request
 11. Dimensions with hinges

Unless otherwise specified, the whole specification is tested with split band 65/85 MHz; GREEN = 0; temp 25°