

# BOOSTRAL 720

Optical RFoG SDU FTTO micronode, 1 active output, 1.2 GHz / 200 MHz



## FORWARD PARAMETERS

Wavelength	1540 ± 1565 nm
Bandwidth	85...258 ± 1218 MHz
Optical AGC range	- 8 ± 0 dBm
Flatness <sup>1</sup>	± 1.0 dB
Equivalent Input Noise Current	< 5 pA / √Hz
Output level <sup>2</sup> :	
CTB ≤ - 62 dBc	75.5 dBµV
CSO ≤ - 64 dBc	75.5 dBµV
Gain limited output level <sup>3</sup>	75.5 dBµV ± 2 dB



## RETURN PARAMETERS

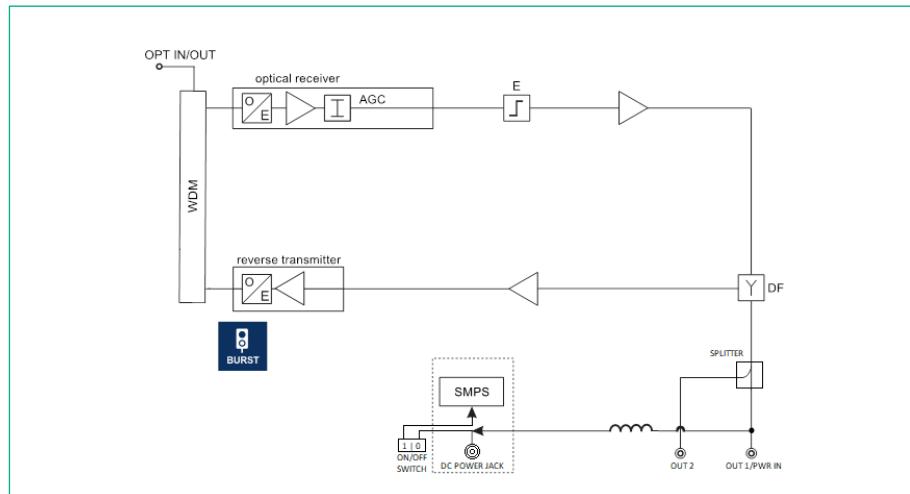
Wavelengths <sup>4</sup>	8 CWDM
Frequency range	5 ± 65...204 MHz
Flatness <sup>5</sup>	± 1.0 dB
Optical output power:	
ON	3 ± 0.5 dBm
OFF	< - 30 dBm
RF input threshold	68.5 dBµV ± 2 dB
Laser rise/fall time <sup>6</sup>	< 1 / <1 µs
NPR / Dynamic range <sup>7</sup>	40 dB / 5 dB
Number of outputs	2 with passive splitting

## OTHERS

Return loss <sup>8</sup>	≥ 18 dB
Voltage range: mains powering	external power supply 230 V AC / 12 V DC connected to the 3.5/1.35 DC Power Jack or RF2/PWR IN port
Power consumption <sup>9</sup>	< 3.0 W
Operation temperature range	0 ± 40 °C
Optical connectors	LC / APC with internal shutter
RF connectors type	2 x F-Type Female Un-Treaded
Protection class	IP 40
Dimensions (W x L x H)	148 x 113 x 40 mm
Weight	0.5 kg

## AVAILABLE VERSIONS

BOOSTRAL 721 356ML O	external power supply, one fiber, upstream 5 ± 65 MHz
BOOSTRAL 721 358ML O	external power supply, one fiber, upstream 5 ± 85 MHz
BOOSTRAL 721 351ML O	external power supply, one fiber, upstream 5 ± 204 MHz



### 1.2 GHz technology

An extended bandwidth in downstream up to 1.2 GHz; DOCSIS 3.1 standard compliant



### 200 MHz technology

A possibility of extending bandwidth in upstream up to 200 MHz



### GaN Technology

The Output parameters for analog and digital carriers improved for lower power consumption



### RFoG SDU / FTTH

To be used in a modern RFoG SDU / Fiber To The Home architecture



### BURST mode

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



### OBI FREE SYSTEM

Device designed to work in OBI FREE system

- In range 85 ± 862 MHz; ± 1.5 dB up to 1218 MHz; typical value
- In accordance to 3 dB slope from 85 MHz to 1218 MHz; CENELEC 42; typical value
- 3,5 % OM1/channel; single carrier; Pin = - 8 dBm; wavelength 1550 nm
- 1371, 1391, 1411, 1431, 1451, 1471, 1511, 1611 [nm]
- Up to 204 MHz; typical value
- European RFoG IEC 60728-14 standard compliant
- Measured with 12 dB link (15km fiber + loss), 60MHz BW noise load, EINC <7pA / √Hz
- In 5 ± 65 MHz; 18 dB for f < 40 MHz; 18 dB - 1.5 dB/oct for f > 40 MHz , but not worse than 11dB
- Powered via DC port; power supply consumes additional 1W

Unless otherwise specified, the whole specifications are tested with 65 / 85 diplex filters installed; at room temperature 25°C and present typical values.