NC100

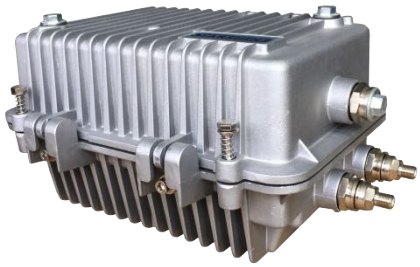
1.2 GHz Optical node, 2 active outputs up to 4 with passive splitting

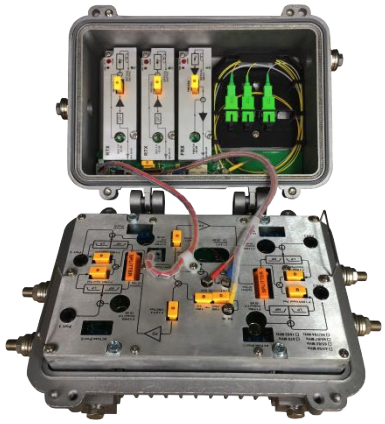
FORWARD PARAMETERS	
Wavelength	1260 - 1620 nm
Bandwidth	85...258 - 1218 MHz
Optical input power range	-9.9 - 2 dBm
Nominalopticalinput range	- 5to+1dBm
Flatness [1]	±0.75 dB
Equivalent Input Noise Current [2]	5 pA / √Hz
Output level: [3]	
CTB ≤ -60 dBc	4 x 117dBµV
CSO ≤ -60 dBc	4 x 118 dB µV
Umax[4]	4 x 112 dB µV
Gain limited output level [5]	4 x 118 dB µV
Number of outputs	2 active, up to 4 with passive splitting
RETURN PARAMETERS	
Bandwidth	5 - 65 ... 204 MHz
Flatness [6]	±0.75 dB
Optical output power [7]	3 or 6 dBm± 0.5 dB
Min RF input level to get 10% OMI [8]	70 dB µV
NPR / Dynamic range [9]	40 dB / 5 dB
OTHERS	
Return loss [10]	> 16 dB
AC voltage range: remote powering	35 - 90 V AC
Max. current for RF / AC IN ports	15 / 25 A
Power consumption [11]	< 36 W
Operation temperature range	-40 - 65 °C
Optical connectors	SC / APC
RF connectors	4 x PG11
Protection class	IP 67
Dimensions (W x L x H)	305 x 200 x 145 mm
Weight	<4.0 kg
AVAILABLE VERSIONS	
NC100-2R1T-60	remote powering; max. config: 2Rx x 1Tx
NC100-1R2T-60	remote powering; max. config: 1Rx x 2Tx

1. In range 85 - 600 MHz; ± 0.75 dB in range 600 - 1006 MHz; ± 1.0 dB in range 1006 - 1218 MHz
2. Typical value; the worst case 6 pA / √Hz
3. According to EN 50083-3, 9 dB slope between 85 to 862 MHz, 42 channels CENELEC, typ. value
4. Full digital load 258 - 1218 MHz, 110 channels QAM 256, 12 dB slope
5. 3.25% OMI, 0dBm optical input level, 1310 nm
6. Up to 85 MHz; ± 0.75 dB up to 204 MHz
7. For CWDM lasers, up to 16 wavelengths are available in 3 dBm version and 8 wavelengths are available in 6 dB version
8. With AT3, AT4, AT5, AT6 =0dB regardless of US configuration
9. Measured with 12 dB link (15 km fiber + loss), 60 MHz BW noise load, EINC 7pA / √Hz
10. In 5 - 65 MHz; 18 dB for f < 40 MHz; 18 dB -1.5 dB / oct for f > 40 MHz, but > 11 dB
11. 60 V AC; Configuration: 2 x FWD Rx, 1 x 3 dBm CWDM lasers

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

Note: Specifications are subject to change without notice.





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

Supports CWDM, DWDM

Multiwavelength technologies

RF amplifier part modular design

RF amplifier part adopts quick plug modular design, can quickly replace RF amplifier module without dismantling the RF cable connector.

RX and TX part modular design

RX and TX part adopts quick plug modular design, easy to repair replacement

GREEN mode

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

Block Diagrams