

# ONU8114

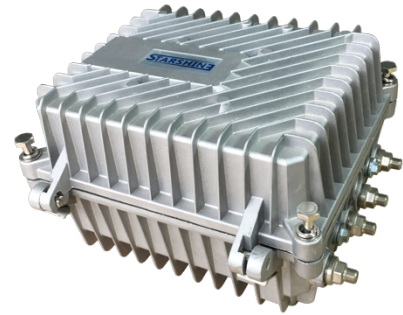
1.2 GHz Optical node, 2 active outputs up to 4 with passive splitting

FORWARD PARAMETERS	
Wavelength	1260 - 1620 nm
Bandwidth	85...258 - 1218 MHz
Optical input power range	- 9.9 - 2 dBm
Nominal optical input range	- 5 to + 1 dBm
Flatness <sup>1</sup>	± 0.75 dB
Equivalent Input Noise Current <sup>2</sup>	5 pA / √Hz
Output level: <sup>3</sup>	
CTB ≤ -60 dBc	4 x 118 dB μV
CSO ≤ -60 dBc	4 x 116 dB μV
Umax <sup>4</sup>	4 x 112 dB μV
Gain limited output level <sup>5</sup>	4 x 112 dB μV
Number of outputs	2 active, up to 4 with passive splitting
RETURN PARAMETERS	
Bandwidth	5 - 65 ... 204 MHz
Flatness <sup>6</sup>	± 0.75 dB
Optical output power <sup>7</sup>	3 or 6 dBm ± 0.5 dB
Min RF input level to get 10% OMI <sup>8</sup>	70 dB μV
NPR / Dynamic range <sup>9</sup>	40 dB / 5 dB
OTHERS	
Return loss <sup>10</sup>	> 16 dB
AC voltage range: remote powering	35 - 90 V AC
AC voltage range: mains powering	100 - 250 V AC
Max. current for RF / AC IN ports	15 / 25 A
Power consumption <sup>11</sup>	< 30 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)	250 x 220 x 150 mm
Weight	< 3.2 kg
AVAILABLE VERSIONS	
ONU8114-1R1T-60	remote powering; max. config: 1Rx x 1Tx
ONU8114-1R1T-230	mains powering; max. config: 1Rx x 1Tx

- In range 85 - 600 MHz; ± 0.75 dB in range 600 - 1006 MHz; ± 1.0 dB in range 1006 - 1218 MHz
- Typical value; the worst case 6 pA / √Hz
- According to EN 50083-3, 9 dB slope between 85 to 862 MHz, 42 channels CENELEC, typ. value
- Full digital load 258 - 1218 MHz, 110 channels QAM 256, 12 dB slope
- 3.25% OMI, 0dBm optical input level, 1310 nm
- Up to 85 MHz; ± 0.75 dB up to 204 MHz
- For CWDM lasers, up to 16 wavelengths are available in 3 dBm version and 8 wavelengths are available in 6 dB version
- With AT3, AT4, AT5, AT6 =0dB regardless of US configuration
- Measured with 12 dB link (15 km fiber + loss), 60 MHz 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 > 11 dB
- 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

## RX and TX part modular design

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

## GREEN mode

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

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## Block Diagrams

