OFN-3175

Optical node

Description:

***OFN-3175** is a miniature compact optical node destined for converting optical signal into RF signal thus to provide end users with digital SD (Standard Definition), HD (High Definition) and analog television. Option DF with built-in diplex filter allows for the efficient use of three optical lengths over a single fiber. **OFN-3175** is compatible with ONU (Optical Network Unit) of GPON and EPON.*
It is ideal solution for home, office and a whole floor of a residential building.

Features:

- ***ALC system for automatic constant output level maintenance within wide range of input optical power from -7.5 to +1.5 dBm;***
- ***Input filter for picking out the TV signal wavelength 1550 nm (option F/DF);***
- ***Optical output with filter for ONU with wavelength of 1310/1490 nm (option DF);***
- ***Remote power supply through RF output (option C);***
- ***LED indication of input optical power;***
- ***Output signal sufficient for feeding several TV sets;***
- ***Extremely low power consumption;***
- ***Small sized compact housing.***

Techincal specification:

Input wavelength for TV signal	1290 ÷ 1600 nm 1550 nm (option ***F/DF***)
Output wavelength for ONU	1310/1490 nm (option ***DF***)
Optical return loss	> 40 dB
Isolation 1550 nm ↔ 1490 nm	> 40 dB
Input optical connector	SC/APC
Output optical connector	SC/PC (option ***DF***)
Output return loss	> 18 dB @ Z=75 Ω
Frequency bandwidth	47 ÷ 862 MHz
Input optical power	–15 ÷ +2 dBm
ALC lock range	–7.5 ÷ +1.5 dBm
Flatness	± 1 dB
Output RF level (@–7.5 ÷ +1.5 dBm & 4.2% OMI/Channel)	≈ 85 dBµV

Miscellaneous

Power supply:	
from mains adapter	5 VDC ±10% (option ***A***)
from mains adapter or through RF output	8 ÷ 35 VDC (option ***C***)
Power consumption	1.75 W
Operation temperature range	0 ÷ +50°C
Dimensions (L x W x H)	116 x 92 x 27 mm
Weight	0.100 kg

Block diagram