

BETA PRO 62G is an optical node designed to meet requirements of modern HFC networks. Setting up the optical node is very easy and comfortable because of the micro-processor controlling unit. This unit also enables adjustment of AGC, slope, gain, etc., without interruption of services. This is extremely important, especially for modern services e.g. VoIP, VoD.

Furthermore this modern solution contributes in cost-reduction of network's maintenance by eliminating the necessity of plug-in modules stock and simplifying installation and adjustment of the device.

The AGC circuit compensates changes in the optical power, thus providing stable RF output level, regardless of input signal fluctuations.

Modern forward path receiver is part of the BETA PRO 62G, allowing operation with low optical input power as required in modern FTTC/FTTB architectures.

BETA PRO 62G can be equipped with two return-path transmitters. Optical transmitters are available in CWDM technology, enabling more effective use of fiber architecture. Space reducing solution for optical diplex filter and fiber management installed in cover of node.

Integrated LED display helps in installation and network diagnostic. The option of displaying optical input power level, eliminates the need for additional measuring equipment for technical staff.

BETA PRO 62G may be equipped with transponder module, enabling remote monitoring and control of particular node parameters. It enables monitoring and managing of three-state ingress switch, receiver redundancy, configuration of AGC settings, as well as slope and level adjustment. Additionally it's possible to monitor input/output optical power of the receiver/transmitter, supervise AC and DC voltages, and control of external contacts and inside temperature.

Optical node

BETA PRO 62G



Features

- 1 GHz platform
- 2 active GaAs outputs
- Electronic adjustment
- Optional Network Management Transponder
- 2 RF ports for reverse path
- Optical AGC
- IP 67 compact housing

RF PARAMETERS

Forward Channel

Wavelength	1100-1600nm
Optical input power range (optical AGC on)	-3/+2 dBm (or -6/-1)
Equivalent input noise current ¹	< 6,5 pA/√Hz
Forward bandwidth	85-1002 MHz
Gain limited output level ²	2x112dBμV
Flatness	±0,75 dB
Output level ³ :	
CTBs-60dBc	2x114 dBμV
CSOs-60dBc	2x114 dBμV
Range of FWD equalizer	0 – 15dB step 1dB
Return loss ⁴	≤-18 dB

Reverse Channel

Optical output power	3 dBm
Wavelength	1290..1610 nm
Bandwidth	5-65 MHz
Minimum input level ⁵	65 dBμV
Range of attenuator	0 – 15dB step 1dB
Flatness	± 1dB
Return loss	≤ -20 dB

OTHERS

Test points	-20 ± 0,75 dB
RF ports quantity / connectors	4 / PG11
Voltage range	30 - 65 VAC
Power consumption	< 42 W
Protection class	IP 67
Operational temperature range	-40 - 60°C
Optical connectors	E 2000
Dimensions with hinge	240x215x116 mm
Weight	4,3 kg

¹ For full range of input optical power

² For 4,5% OMI/channel and input optical power -4 dBm

³ According to EN 50083-3, 9dB interstage slope, 42 channel CENELEC,

⁴ f 40MHz, f > 40MHz: +1,5/oct, but -10dB

⁵ for 11% OMI

BLOCK DIAGRAM

