

DISTRIBUTION AMPLIFIER

BETA PRO 22G is a modern two outputs broadband amplifier dedicated to be used for both line and distribution applications of the HFC network.

Thanks to bandwidth extension up to 1GHz new BETA PRO 22G meets future demands for more bandwidth. Adjustment has been simplified due to μ P control unit that enables uninterrupted configuration of the gain and slope.

When amplifier is working in ANA System, can be connected up to a few end amplifiers (ex. LAMBDA PRO 42G) that might be remotely adjusted from GHHT - Group Hand Held Terminal.

All set-ups of BETA PRO 22G are stored in QIS (Quick Installation Stick Module) for fast and easy restore in case of the amplifier exchange.

New MESFET GaAs technology applied in BETA PRO 22G has been specially designed to achieve high performance of combined analogue and digital output signals. This technology allows to add digital signals to the existing analogue ones without degrading the combined signal performance.

Efficient overvoltage and surge protection applied in BETA PRO 22G followed by high IP 65 class protection guarantee high resistance to environmental factors. Both high reliability of the device and services are offered.

The amplifier may be powered locally with voltage 24÷65V AV through AC IN port which can pass up to 15A or remotely with 10A current passing by each RF port. If there is a need to supply amplifier from 230 V AC special network power supply MEP3003 CGCS can be used.

BETA PRO 22G



- ▶ 1GHz in Downstream / up to 100MHz in Upstream
- ▶ Modern MESFET GaAs technology
- ▶ Electronic adjustment
- ▶ Remote configuration via GHHT or local configuration via LED DISPLAY
- ▶ Efficient surge protection
- ▶ Low power consumption
- ▶ QIS for easy reinstallation & data storage
- ▶ RS port for local firmware exchange

PRODUCT SPECIFICATIONS

RF PARAMETERS	
Forward Channel	
Bandwidth	54...130 ÷ 1002 MHz
Gain @1GHz	40 ± 0.75 dB
Noise figure ¹	< 8 dB
Flatness ²	± 0.75 dB
Slope	± 1 dB
Output level typ. @862MHz ³ :	
CTB ≤ -60 dBc	114 dBμV
CSO ≤ -60 dBc	114 dBμV
Return loss ⁴	> 18 dB
Input testpoint (bi-directional)	-20 dB
Output testpoints (directional)	-20 ± 0.5 dB
Forward gain (A), slope (E) control:	
A1, E1	0 ÷ 20 step 0,5 dB
A2, E2	0 ÷ 15 step 0,5 dB
Reverse Channel	
Bandwidth	5 ÷ 42...100 MHz
Flatness	± 0.75 dB
Return loss ⁵	> 18 dB
Gain port - port ⁶ / passive	16 / - 8 dB
HUM modulation ⁷	≤ -60 dBc
Reverse gain (A), slope (E) control:	
A3, A4, E3	0 ÷ 20 step 0,5 dB

OTHER	
Voltage range	24 ÷ 65 V AC
Max. current for RF ports	10 A
Max. current for AC IN port	15 A
Power consumption	< 20 W
Operation temperature range	-20 ÷ 60 °C
Connectors	3 x IEC14 M
Protection class	IP 65
Dimensions (WxLxH)	245 x 215 x 91 mm
Weight	2.9 kg

¹ Up to 1002MHz, with duplex filter

² Valid 5MHz after the starting frequency of the selected duplex filter

³ With duplex filters according to EN50083-3, 9dB interstage slope, 42 channels CENELEC

⁴ 18dB for f ≤ 40MHz, 18dB -1,5dB/oct for f > 40MHz

⁵ >16dB for 5 ÷ 8MHz; > 18dB for f > 8MHz

⁶ One active output

⁷ For f > 18MHz, remote current < 8A @25°C

BLOCK DIAGRAM

