

HARGON 3610

Trunk / distribution amplifier, 1 active output, 1.2 GHz / 200 MHz

RF PARAMETERS

Forward Channel

Bandwidth	85...258 - 1218 MHz
Gain @1.2 GHz TRUNK / DISTRIBUTION	35 / 44 ±0.5 dB
Noise figure ¹	< 7.5 dB
Flatness TRUNK / DISTRIBUTION	±0.75 dB
Output level: ²	
CTB ≤ -60 dBc	118 dBμV
CSO ≤ -60 dBc	120 dBμV
Umax ³	112 dBμV
Input testpoint (directional)	-20 ±1.0 dB
Output testpoints (directional)	-20 ±0.75 dB

Reverse Channel

Bandwidth	5 - 65...204 MHz
Gain @204 MHz	28 ±0.75 dB
Noise figure ⁴	< 5.5 dB
Flatness	±0.5 dB
NPR / Dynamic range ⁵	51 dB / 22 dB

OTHERS

Voltage range: remote powering	30 - 65 V AC
Max. current for RF / AC IN ports	10 / 16 A
HUM modulation ⁶	≤ -62 for 7 A
Return loss ⁷	> 18 dB
Power consumption ⁸	20 W
Operation temperature range	-40 - 60 °C
RF Connectors	3 x PG11
Protection class	IP 67
ESD protection	4 kV
Surge protection	6 kV
Dimensions (W x L x H)	261 x 225 x 88 mm
Weight	2.4 kg

AVAILABLE VERSIONS

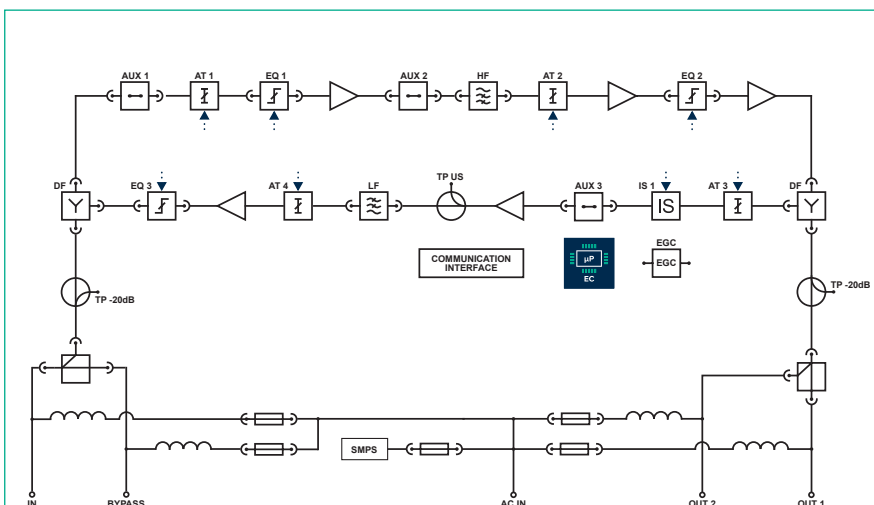
HARGON 3610 079Y	remote powering
------------------	-----------------



- 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
- Electronic control**
A quick and uninterrupted device configuration
- VMC (VECTOR Mobile Commander)**
Convenient and user-friendly configuration through mobile devices

OPTIONAL:

- Spectrum Analyzer**
Offers visibility over the whole frequency bandwidth
- Auto Alignment**
Self configuration based on optimal amplifier settings
- NMS transponder**
Reduced operating costs thanks to the remote monitoring and configuration
- VIG (VECTOR Ingress Guard)**
System compliant; Verification and elimination of the source of ingress in the network
- ALSC (Automatic Level and Slope Control)**
Flat and stable Output characteristics due to the compensation of temperature changes in the cables.
- Bypass**
Flexible implementation in different network architectures



Downstream Configuration:

Input/Interstage gain control (AT1, AT2): 0 - 20, step 0.5 dB
Input/Interstage slope control (EQ1, EQ2, EQ3): 0- 18, step 0.5 dB

Upstream Configuration:

Output/Interstage gain control (AT3, AT4): 0 - 20, step 0.5 dB
Output slope control (EQ5): 0- 18, step 0.5 dB
Ingress switches (IS1): 0, -6, -40 dB

1. 7.5 dB - 750 MHz; 8.0 dB - from 750 MHz to 950 MHz; 9.0 dB - from 950 MHz to 1218 MHz
2. According to EN50083-3, 9 dB interstage slope between 85 - 862 MHz, 42 channels CENELEC
3. 110 ch 256 QAM, pre-FEC BER 10-9, 9 dB slope between 258 and 1218 MHz
4. @204 MHz + 1 dB
5. NPR @ -9 dBμV / Hz, measured 5 - 204 MHz with 180 MHz loading, 5 dB interstage attenuator
6. For f > 15 MHz < f < 1 GHz
7. 18 dB for f ≤ 40 MHz, 18 dB -1.5 dB / oct for f > 40 MHz, but not worse than 12 dB
8. For 65 V AC

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