# AC2000

Dual active output amplifier with 2 x 40 dB gain and especially wide gain range

#### AC2000 G features:

- 1 GHz bandwidth
- Remote power supply with PFC
- All amplifiers stages use GaAs technology
- 1...3 outputs by internal splitting
- Plug-in module adjustments
- Excellent ESD and surge protection
- Optional high performance return amplifier
- Fixed station memory for electrical identification
- Electrical gain & slope control modules available
- With AC6951 transponder module: CATVisor or HMS compatible transponder with wide frequency ranges, ALSC with fully user programmable pilots, Downstream spectrum analyser and Upstream signal quality monitoring

### **Benefits:**

#### Especially wide gain range

In AC2000 G, both the input and output amplifier stages are based on high performance GaAs solutions, which makes the used gain range especially wide.

#### Usable for distribution and lower level trunk output

Can be used for distribution with 2 high gain and high level outputs. Lower level trunk output is available with ALSC function and 1 or 2 high level bridger outputs.

#### In-built essential features

All essential return path elements such as ingress switches are fixed built on the motherboard but for example return amplifier module can be chosen by the needed performance.

## **Specifications:**

Downstream signal path (values with diplex filters)		
Frequency range	47 / 54 / 70 / 85 / 1081006 MHz	
Return loss	20 dB	
Gain	2 x 3040 dB	
Input attenuator control range	20 dB	
Input equaliser control range	25 dB	
Mid-stage slope	8 dB	

Flatness	± 0.4 dB
Group delay	2 ns
Test point	-20 dB
Transponder connection	- 19 dB
Input by-pass attenuation	- 2 dB
Noise figure	5.4 dB
Umax(112 QAM channels)	108.5 dBuV
CTB 42 channels	114.0 dBμV
CSO 42 channels	116.0 dBμV
XMOD 42 channels	112.5 dBμV
CTB 110 / 77 channels	71.0 / 81.0 dBc
CSO 110 / 77 channels	70.0 / 79.0 dBc
XMOD 110 / 77 channels	67.0 / 74.0 dBc

Upstream signal path (values with diplex filters)	
Frequency range	530 / 42 / 50 / 65 / 85 MHz
Return loss	18 dB
Gain	2 x 18.0 / - 8.5 dB
Ingress switching	0 / - 6 / < - 50 dB
Gain control range	20 dB
Equaliser control range	7 dB
Flatness	± 0.5 dB
Transponder connection	- 26 dB
Noise figure	10.0 dB
Output level, DIN 45004B	113.0 dBμV
CINR	> 62 dBc

General	
Power consumption (65 / 230 VAC)	25.5 / 27.5 W
Supply voltage	2765 VAC , ±3390 VDC / 205255 VAC
Maximum current feed through	8.0 A / port
Hum modulation	70 dB
Resistance for remote current	25 mΩ / port
Input / Output connectors	PG11
Test point connectors	F- female
Dimensions (h x w x d)	245 mm x 255 mm x 100 mm
Weight	3.0 kg
Operating temperature	-40+55 °C
Class of enclosure	IP67
EMC	EN50083-2
ESD	4 kV
Surge	6 kV