

DISTRIBUTION AMPLIFIER

BETA UC 834C is a broadband amplifier dedicated to be used for both trunk and distribution HFC networks.

Modern technology applied in BETA supports high output level connected with low intermodulation distortion.

It's modular design allows for flexible configuration and step-by-step development of the system including conversion to fiber node.

BETA UC 834C is prepared to work with CCC special modem. It allows for remote control of switched multitar, as well as AC input voltage and DC voltage from power supply management. There is an additional external connector for modem configuration.

The same type of pads are used to achieve required equalization and attenuation. This feature significantly reduces the number of needed modules and cuts down operational costs of installation.

Internal split of the input and output RF signal by means of plug-in splitter/tap modules is available.

BETA UC 834C



- ▶ High power GaAs output
- ▶ Adapted for CCC MODEM
- ▶ Convertible to optical node
- ▶ Fixed pads for equalization and attenuation
- ▶ Reverse path plug-in ingress filter module
- ▶ Input and output plug-in splitter module

PRODUCT SPECIFICATIONS

RF PARAMETERS	
Forward bandwidth	47...85 ÷ 862 MHz
Forward gain @862MHz	38 ± 0.75 dB
Noise figure	<7.5 dB
Forward flatness ¹	± 0.6 dB
Forward slope	± 1 dB
Output level typ. [dBμV] ²	110 dB
CTB ≤ -60 dBc	113 dB
CSO ≤ -60 dBc	113 dB
Return loss [dB] ³	< -18 dB
Input testpoint (bi-directional)	-20 ± 1.5 dB
Output testpoints (directional)	-20 ± 0.75 dB
Reverse bandwidth [MHz]	5 ÷ 30...65 MHz
Reverse flatness	± 0.75 dB
Reverse gain ⁴	22/17/-3 dB
HUM modulation ⁵	≤ 65 dBc

OTHER	
Weight	2.4 kg
Dimensions (WxHxD)	243 x 214 x 125 mm
Protection class	IP 34
Operation temperature range	-40 ÷ +60 Deg C
AC Voltage range	24 ÷ 65 V
Power consumption ⁶	11/13 W
Max. current for AC IN port	15 A
Max. current for RF ports ⁷	10 A
Connectors IN/OUT	PG11/PG11 (others on request)

¹ Valid 5MHz after the starting frequency of the selected diplex filter

² With diplex filters according to EN50083-3, 9dB interstage slope, 42 channels CENELEC

³ With diplex filters DF 65, -18dB for f < 40MHz, -18dB +1,5dB/oct. for f > 40MHz

⁴ For active return path (depending on configuration) / passive return path

⁵ For f > 10MHz, remote current < 8A

⁶ Without / with reverse amplifier RA

⁷ Except OUT1, OUT2

BLOCK DIAGRAM

