

DISTRIBUTION AMPLIFIER

BETA UC 834 a modern broadband amplifier dedicated to be used for both line and distribution applications of the HFC network.

Modular design of BETA UC 834 allows for cost effective reconstruction of the network for deep fibre penetration. Conversion of amplifier into the optical node is done by installing additional optical receiver and transmitter modules avoiding cost involved in replacement of the whole unit. BETA UC 834 can be equipped with NMS transponder and can work with different network monitoring systems. Such solution allows to monitor critical parameters which finally results in substantial improvement of the reliability of the system.

Efficient overvoltage and surge protection applied in BETA UC 834 followed by high IP 67 class protection guarantee high resistance to environmental factors. Both high reliability of the device and services are offered.

Usage of the same ATG pads for adjusting slope and attenuation significantly reduce the number of configuration modules as well as operational and maintenance costs.

Modern design of BETA UC 834 offers high performance of the transmitted analogue and digital signals. Flexible configuration and functionality allow to effectively apply the device in different HFC applications.

BETA UC 834



- ▶ High power GaAs output
- ▶ Convertible to optical node
- ▶ Fixed pads for equalization and attenuation
- ▶ Reverse path plug-in ingress filter module
- ▶ Input and output plug-in splitter module
- ▶ 10A current passing
- ▶ IP67 compact housing

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 89 mm
Protection class	IP 67
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	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

BLOCK DIAGRAM

