



RF Amplifiers

HOME AMPLIFIER **3VHA-ARxxx**

The 3VHA-ARxxx is a 1.2 GHz DOCSIS 3.1 amplifier with 4 Ports. The product comes equipped with 2 bidirectional data ports and 2 unidirectional TV ports. The 3VHA-AR085 has an 85 MHz, and the 3VHA-AR204 a 204 MHz upstream path.

3VHA-ARxxx features

- Frequency range up to 1218 MHz, Docsis 3.1 compliant
- 4 user ports compact amplifier
- Outer plastic housing to secure against electrical contacts
- Forward path with differentiated gain according to ports
- Energy saving power supply
- Data ports equipped with 75 Ohm terminators
- Fixed power cord

One of Teleste's superior performance products
designed for easy installation and reliability.

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HOME AMPLIFIER / 3VHA-ARxxx

TECHNICAL SPECIFICATIONS: DOWNSTREAM ⁽¹⁾			
Frequency range	105/258...1218 MHz ⁽²⁾	Noise figure	6.5 dB
Gain		Isolation	
DATA1	2.5 dB	DATA-TV, 105/258...1006 MHz	30 dB
DATA2	2.5 dB	DATA-TV, 1006...1218 MHz	25 dB
TV0	0 dB	TV-TV, 105/258...1006 MHz	27 dB
TV1	4 dB	TV-TV, 1006...1218 MHz	23 dB
		DATA-DATA, 105/258...1006 MHz	25 dB
		DATA-DATA, 1006...1218 MHz	20 dB
Flatness	± 1 dB	Group delay	6 ns
Return loss	18 dB @ 40 MHz -1.5 dB/oct., min. 12 dB	Umax (120 channels, QAM256)	84 dBμV
		CTB (34 channels flat @ 87 dBμV)	70 dB
		CSO (34 channels flat @ 87 dBμV)	60 dB

TECHNICAL SPECIFICATIONS: UPSTREAM ⁽¹⁾			
Frequency range	15...85/204 MHz ⁽²⁾	Isolation between ports	26 dB
Return loss		Group delay	
17...81/195 MHz	18 dB	17...85/204 MHz	20 ns
Gain		Upstream intermodulation	
DATA1	1 dB	2nd order	60 dB
DATA2	1 dB	3rd order	60 dB
Flatness	± 1 dB	Ingress suppression (5...10 MHz)	30 dB
Noise figure	≤ 15 dB		

GENERAL SPECIFICATIONS ⁽¹⁾			
Supply Voltage	220...240 VAC/50 Hz	Dimensions	205 x 80 x 40 mm
Power Consumption	4W	Connectors	moulded F-female acc. to IEC-169-24
LED	Green	EMC compatibility	EN 60728-2
Operating temperature	- 5 ° to + 40 °C	Safety	EN 60728-11
Class of enclosure	IP 20	Surge	1 kV, IEC 61000-4-5
Color	RAL 1013	ESD	4 kV, IEC 61000-4-2

NOTES

- (1) Typical values. Please contact us for detailed conditions.
 (2) 3VHA-AR085 split between 85...105 MHz and 3VHA-AR204 split between 204...258 MHz.

BLOCK DIAGRAM	UPSTREAM CINR CURVE

ORDERING INFORMATION

3VHA-AR085	1.2 GHz amplifier with 85 MHz upstream path, F-terminators on both DATA ports and customer specific logo.
3VHA-AR204	1.2 GHz amplifier with 204 MHz upstream path, F-terminators on both DATA ports and customer specific logo.

Contact us for more information about the option to use alternative logos.



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