



PRODUCT FAMILY	PRODUCT MODEL
DH AND HOME AMPLIFIERS	HOME AMPLIFIERS
FEATURES	
	<ul style="list-style-type: none"> >> Extended frequency range 5-65/85-1218 MHz >> Amplification 0.5/2/4/8 dB matching different cable lengths >> Outstanding RF performance >> 4 outputs, all ports F female >> Power supply 12 VDC included >> ABS plastic Housing included >> Kabel Keur PVE4.0 certified (up to 1006 MHz)

FORWARD PATH SPECIFICATIONS

Frequency range		85 – 1218 MHz
Nominal Gain	Port 1 Port 2 Port 3 Port 4	0.5 dB 2.0 dB 4.0 dB 8.0 dB
Tolerance Ripple/Error		+/- 1 dB
Noise Figure		≤ 6.0 dB
Channel loading	CSO CTB	≤ -65 dBc (Typ. -70 dBc) ⁽¹⁾ ≤ -66 dBc (Typ. -75 dBc)

RETURN LOSS (dB, Min.) – All Ports

Frequency (MHz)	
85 - 1218	18 ⁽²⁾

ISOLATION (dB, Min.) – PORT to PORT

85 – 1006	27
1006 – 1218	23

ISOLATION (dB, Min.) – OUTPUTS to RF IN

85 - 1218	26
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GROUP DELAY

85 – 120	≤ 20 ns ⁽³⁾
120 – 1218	≤ 10 ns ⁽³⁾

Teleste reserves the rights to alter specifications, features, manufacturing released and even the general availability of the product at any time.

REVERSE PATH SPECIFICATIONS

Frequency range		5 – 65 MHz
Nominal Gain	Port 1 Port 2 Port 3 Port 4	1.0 dB 1.0 dB 1.0 dB 1.0 dB
Tolerance Ripple/Error		+/- 1 dB
Noise Figure		≤ 14.0 dB
Intermodulation	2 nd order 3 rd order	≤ -60 dB ⁽⁴⁾ ≤ -50 dB ⁽⁵⁾
Maximum input level		116 dBμV ⁽⁶⁾

RETURN LOSS (dB, Min.) – All Ports

Frequency (MHz)		
5 - 65		18 ⁽²⁾

ISOLATION (dB, Min.) – PORT to PORT

5 - 10		26
10 - 65		30

ISOLATION (dB, Min.) – RF IN to OUTPUTS

5 - 65		26
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GROUP DELAY

5 – 10		≤ 30 ns ⁽⁷⁾
10 – 65		≤ 10 ns ⁽⁷⁾

GENERAL SPECIFICATIONS

Nominal impedance	75 Ohm
Supply voltage	12 VDC, 270 mA
Input / Output connectors	F female
Housing	Zinc alloy / ABS plastic
Dimensions h x w x h	100 x 85 x 26 mm 125 x 90.4 x 30 mm
Operation temperature	0 ... +40°C
Class of enclosure	IP20
EMC	IEC60728-2



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Screening effectiveness (dB, Min.) 5 - 30 30 - 300 300 - 470 470 - 950 950 - 1218	Exceeds Class A 85 85 80 75 55
Power supply (switch mode AC/DC) Input Output Power consumption Connector	110 – 240 VAC 50 Hz 12 VDC 500 mA ≤ 4.0 W 3.5 mm DC plug
Galvanic isolation Inner conductor input to Inner conductor output	2120 VDC ≤ 0.7 mA ⁽⁸⁾
Galvanic isolation Inner conductor input to Inner conductor output	230 Vac ≤ 8.0 mA RMS ⁽⁸⁾
Surge immunity On all ports	1 kV, 1.2/50 µsec ⁽⁹⁾
Spurious / Oscillation 5 - 65 / 85 – 1218 MHz	≤ -20 dBµV



The OV-8420 is an active splitter enabling downstream traffic up to 1.2 GHz with a 65/85 MHz split band.

This allows operators to use the new DOCSIS 3.1 downstream spectrum with their customer enabling higher throughput and more efficient bandwidth use.

Notes

- (1) CENELEC 42 ch. @ (77 + gain) dBµV on the output
- (2) F > 40 MHz -1.5 dB/oct.
- (3) Δ 4.43 MHz
- (4) 2-tone test @115 dBuV, measured on input port
- (5) 3-tone test @115dBuV, measured on input port (≤ -62 dB acc.DIN45004B 115/109/109 dBµV)
- (6) @ BER < 1*10E-8
- (7) Δ 2.0 MHz
- (8) Safety: IEC 60728-11§10 / EN 50083-1/A1 §9
Requirement: 2120 VDC: T ≥ 1 minute, I ≤ 0,7 mA, 230 VAC: I ≤ 8,0 mA RMS
- (9) Surge voltage according to IEC 61000-4-5, EMC (class 2, level 2) applied between the inner and outer conductor of each port.
- (10) F1+F2 w.r.t. F1 and F2 @ 115 dBµV at input port, after 10 pulses 25 Vdc (rise time 1,2 µsec/500 µsec. duration) at all ports)

ORDERING INFORMATION

OV-8420	4-Way amplifier
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