



## MULTIBAND AMPLIFIER PROFI-LINE



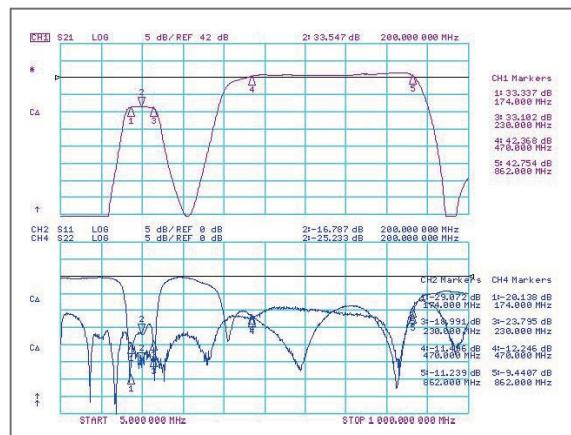
Terrestrial TV

### General description

The multiband amplifiers of the MBV series are suitable for digital signals and have a low noise amplifier with highly selective band-range inputs. These amplifiers are suitable for use in all smaller and middle-sized community antenna systems in which terrestrial signals need to be amplified. The extremely low noise figure also enables the insertion of DVB-T antenna signals.

### The advantages at a glance

- HQ-Series
- Die cast housing, IP 50
- DVB-T broadband antenna (BIII+BIV/V), connectable
- DVB-T low noise input
- High output level
- Excellent linearity
- Attenuators -20 dB at all inputs
- Remote feeding 12V for pre-amplifiers, selectable
- Switch mode power supply



The allocation of terrestrial channels with digital transponders (DVB-T) puts high demands on multi-band amplifiers. The amplifiers must avail of high drive reserves in order to prevent an overdriving of the amplifier stages through energy-rich COFDM signals in DVB-T. It is also important that the band-pass filter is highly selective in order to suppress interferences, especially between the UHF- and SAT-IF ranges. Both effects would cause interferences of the analogue TV programs or in case of digital signals, cause the total loss of the picture or chunk it up.

The use of steeply edged filters with high stop-band attenuation and the use of state-of-the-art GaAs-MMIC parts makes DELTA's MBV's the best in regard to the high requirements of DVB-T operation.

Plot display of the MBV 40-3 frequency range when combining Band III and IV/V for DVB-T.



## MULTIBAND AMPLIFIER PROFI-LINE



- Die cast housing
- RF connectors: F sockets
- High output level
- DVB-T low noise input
- Excellent linearity
- Switch mode power supply
- Remote feeding 12 V/100 mA via all TV- inputs selectable

■ **MBV 40-3:** broadband input (UHF + B III)  
insertable

■ **MBV 4030 S:** with SAT-IF input

Type		MBV 40-3	MBV 4030 S
Article No.		1016 1671	5700 0880
No. of inputs		3	6
Frequency range/inputs	MHz		
B I / FM		47-108	47-68 / 87,5-108
B III		174-230	174-230
B IV/V		—	470-862
B IV/V		—	470-862
B IV/V (DVB-T)		470-862 <sup>1</sup>	470-862
SAT-IF		—	950-2200
Gain	dB		
B I / FM		24	34
B III		28/34, selectable	34
B IV/V		—	34/40, selectable
B IV/V (DVB-T)		36/42, selectable	41/47, selectable
SAT-IF		—	21 ... 30
Attenuators at all inputs	dB	0 ... 20	0 ... 20
Noise figure	dB		
B I / FM		7	4,5
B III		5,5	4,5
B IV/V		—	12
B IV/V (DVB-T)		4,5	5
SAT-IF		—	8
Linearity	dB	± 2,0	± 2,0
Output level			
60 dB IMA 3	dBµV	117	B I/FM: 121, B III: 118, B IV/V: 115
60 dB IMA 2	dBµV	109	B I/FM: 109, B III: 109, B IV/V: 108
35 dB IMA (SAT-IF)	dBµV	—	116
Operating voltage	V~	185-265	185-265
LNB remote feeding	V=	—	12/18, 22 kHz, insertable (150 mA)
Power consumption	W	7	8
Dimensions	mm	188 x 85 x 50 (IP 20)	210 x 122 x 70 (IP 50)
Weight	kg	1,2	1,2

<sup>1</sup> UHF-input switchable to B IV/V + B III, thus a DVB-T broadband antenna (B III+B IV/V) is directly connectable



## MULTIBAND AMPLIFIER PROFI-LINE

- Die cast housing, IP 50
- RF connectors: F sockets
- High output level
- DVB-T low noise input
- Excellent linearity
- Attenuators -20 dB at all inputs
- Highly efficient switch mode power supply
- Remote feeding 12 V/100 mA via all TV- inputs selectable

■ **MBV 40-6:** Push-Pull GaAs-FET Technology,  
test socket -30 dB



Type		<b>MBV 40-4</b>	<b>MBV 40-5</b>	<b>MBV 40-6</b>
Article No.		1016 1397	1016 1387	1016 1388
No. of inputs		4	5	6
Frequency range/inputs	MHz			
B I / FM		47-68 / 87,5 - 108	47-68 / 87,5 - 108	—
FM		—	—	87,5-108
B I/III		—	—	47-68/174-230
B III		174-230	174 - 230	174-230
B IV/V		470-862	470-862	470-862
B IV/V		470-862	470-862	470-862
DVB-T		—	470-862	470-862
Gain	dB			
B I / FM		34	34	—
FM		—	—	36
B I/III		—	—	36
B III		34	34	36
B IV/V		34/40, selectable	34/40, selectable	38/44, selectable
B IV/V		34/40, selectable	34/40, selectable	38/44, selectable
DVB-T		—	41/47, selectable	41/47, selectable
Attenuators at all inputs	dB	0 ... 20	0 ... 20	0 ... 20
Noise figure	dB			
B I / FM		5	4,5	—
FM		—	—	7
B I/III		—	—	7
B III		5	4,5	7
B IV/V		8	12	10,5
B IV/V		8	12	10,5
DVB-T		—	5	7
Linearity	dB	± 2,0	± 2,0	± 2,0
Output level				
60 dB IMA 3	dB $\mu$ V	117	117	121
60 dB IMA 2	dB $\mu$ V	109	109	115
Operating voltage	V~	185-265	185-265	185-265
Power consumption	W	7	7,5	10,3
Dimensions	mm	210 x 122 x 70	210 x 122 x 70	210 x 122 x 70
Weight	kg	1,2	1,2	1,2