



# Multichannel headend Multiband system amplifier

- FM, Bill & DAB and UHF inputs
- high output level
- built-in gain controls
- DC feeding for preamplifiers through RF inputs
- DIN rail or wall mounting
- robust die-cast housing
- connectors:  
4xRF - type F  
screw terminal block for DC entry  
power distribution bus



### Technical specifications

T Y P E		ma400
<b>Ordering number</b>		10503
<b>Gain</b>	FM (88-108 MHz)	30 dB
	VHFIII (174-260 MHz)	30 dB
	UHF (470-862 MHz)	30 dB
<b>Number of inputs</b>		3
<b>Noise figure</b>		VHF < 7 dB; UHF < 5 dB
<b>Maximal output level IMD3=60 dB (DIN45004B)</b>		VHF 116 dBμV; UHF 118 dBμV
<b>Gain control</b>	attenuator	0 ÷ -15 dB
	switch	0/-10 dB
<b>Return loss</b>		> 10 dB
<b>DC feeding for external (total)</b>		12 V 0.1 A max.
<b>Current consumption*</b>		12 V 0.48 A
<b>Operating temperature range</b>		0° ÷ +50° C
<b>Dimensions/Weight (packed)</b>		36x198x107.5 mm/ 0.9 kg

\* without external DC loading

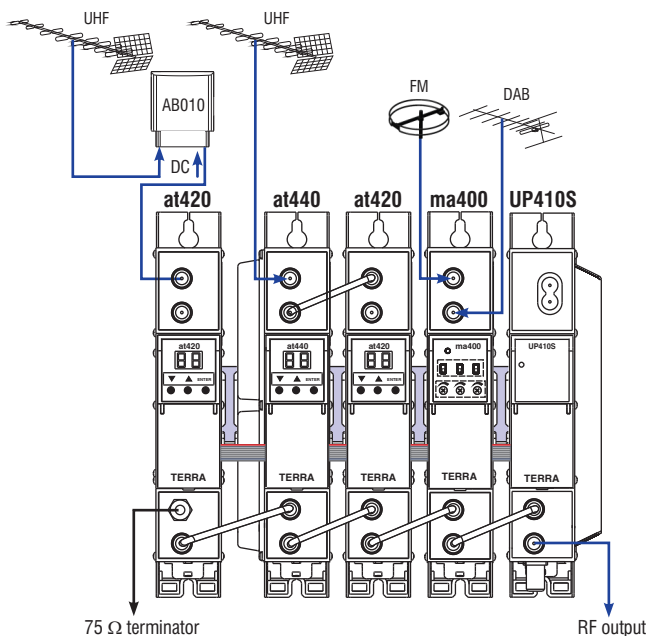
# Power supply

- modular power supply with integrated RF combiner
- switch-mode technology
- short circuit and overload protected
- DIN rail or wall mounting
- robust die-cast housing
- connectors:  
3xRF - type F  
screw terminal block for DC output  
power distribution bus



### Technical specifications

T Y P E		UP410S
<b>Ordering number</b>		02874S
<b>Power supply</b>	input voltage	187-250 V~ 50/60 Hz
	output voltage, current	12 V 4.5 A max.
	power consumption	65 W max.
<b>RF combiner</b>	frequency range	47-2400 MHz
	insertion loss	4 dB at 862 MHz 6 dB at 2400 MHz
	isolation	≥ 20 dB
	return loss	≥ 20 dB at 862 MHz ≥ 12 dB at 2400 MHz
	<b>Operating temperature range</b>	0° ÷ +50° C
<b>Dimensions/Weight (packed)</b>		48x198x107.5 mm/0.97 kg



Application diagram of filtering 8 TV channels from 2 directions & combining with FM and DAB signals.  
DC power is distributed from single power supply by power distribution bus.

AB010 - fixed gain UHF masthead amplifier  
at420 - two sections TV channel amplifier  
at440 - four sections TV channel amplifier