



### Features

*Made In Europe*

#### UHF TV DUAL Channel Amplifiers - AT420

- TV channel amplifiers tunable in UHF range
- SAW filters provide a high selectivity processing of digital and analog channels

#### Multiband System Amplifier - MA400

- FM, BIII & DAB and UHF inputs
- High output level, Built-in gain controls

#### Power Supply - UP410S

- Modular power supply with integrated RF combiner
- Switch-mode technology, Short circuit and overload protected

### Specifications

Model		AT420		Model		MA400	
RF Input	Sections	2		Gain	FM (88-108 MHz)	30 dB	
	Tuning Range of Channels	470 ~ 862 MHz			VHFIII (174-260 MHz)	30 dB	
	TV Standard	pr. Analog (G, K, I, NZ)	DVB-T* / DTMB		UHF (470-862 MHz)	30 dB	
	Channel Bandwidth	8 MHz	8 MHz		Number of Inputs	3	
	Level / Impedance	60-85 dBμV/75 Ω	50-80 dBμV/75 Ω			Noise Figure	< 7 dB; UHF < 5 dB
	Frequency Range of RF Distribution	47-862 MHz			Maximal Output Level		VHF 116 dBμV; UHF 118 dBμV
	Loop Through Gain	0 ± 1.5 dB			IMD3=60 dB (DIN45004B)	UHF 118 dBμV	
	Return Loss	>12 dB			Gain Control	Attenuator	0 ~ -15 dB
Level / Impedance, Typical	90 dBμV / 75 Ω	85 dBμV/ 75 Ω	Switch	0/-10 dB			
RF Output	MER of DVB-T Signal	---	≥ 36 dB (input signal MER 38 dB)	Return Loss	> 10 dB		
	Frequency Range of RF Combining	47 ~ 2150 MHz		Connector / Impedance	F type / 75 Ω		
	DC Pass Through	0.3 A		DC Feeding for External (Total)	12V 0.1 A (Max.)		
	Combining Through Loss Terr/SAT	1.5/2.5 dB		Current Consumption	* * 12V 0.48 A		
	Level Adjustment Range	pr. 0 ~ -10 dB by 1 dB step		Operating Temperature Range	0°C ~ +50 °C		
	Return Loss	≥10 dB		Dimensions / Weight (packed)	36 x 198 x 107.5 mm / 0.9 kg		
	Noise Figure	Less than 7 dB		<b>Model UP410S</b>			
	Selectivity, Typical	pr. 40 dB, ±1.25 MHz from 8 MHz bandwidth border		Power Supply	Input Voltage	187~250 V 50/60 Hz	
Offset	* ±1 MHz by 0.25 MHz step		Output Voltage, Current		12V 4.5 A max.		
General	Spurious Signals Level	≤ -60 dBc		Power Consumption	65 W max.		
	Mirror Channel Selectivity	≥ 60 dB		RF Output	Frequency Range	47~2400 MHz	
	Flatness of Channel Bandwidth, Typical	± 1.5 dB			Insertion Loss	@ 862 MHz	4 dB
	Connector / Impedance	F type / 75 Ω		@ 2400 MHz	6 dB		
	DC Feeding for External	12V 0.1A max.		Isolation	≥ 20 dB		
	Current Consumption	* * 12V 0.45A		Return Loss	@ 862 MHz	≥ 20 dB	
	Operating Temperature Range	-10 °C ~ +60 °C		@ 2400 MHz	≥ 12 dB		
	Dimensions / Weight (packed)	36 x 198 x 107.5 mm / 0.9 kg		Other	Operating Temperature Range	0 °C ~ +50 °C	
			Dimensions	48 x 198 x 107.5 mm			
			Weight (packed)	0.97 kg			

\* The offset is used for fine tuning of the channel frequency response

pr. Software control

\* \* Without external DC loading

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.