

TDA-500 Dual-channel amplifier TDA-500

ARMT.665230.139



TDA-500 digital amplifiers are used in the industrial public address systems DCN and IPN manufactured by Armtel for signal output to 100 V public address lines. The amplifiers are equipped with one or two amplifier channels, with class D output stage and transformer isolation, having the efficiency over 85%. The built-in protection against overvoltage, short-circuit, idle running and overheat, as well as the availability of stand-by supply input for the amplifiers improve reliability of the public address system based on these amplifiers

Key features:

- Steel enclosure of 2U height for installation in 19" cabinet;
- Main supply from 127/220 V DC network, the stand-by supply input of 48-68 V;
- Automatic switch to the stand-by supply with the main supply power-off;
- Symmetrical LF-inputs with transformer galvanic isolation;
- lower heat emission, with the efficiency over 85%;
- LED indicators of signals and operation modes;
- Volume controls, high and low frequency tone controls;
- Built-in control circuit for soft line power-on;
- Built-in protection circuit against overload and overheat.

Technical specifications

Parameter	Measurement conditions for TDA-500	In dual-channel mode	In single-channel mode	
Power (RMS – Rated Maximum Sinusoidal) (at 230V ~power supply)	40 Ohm/100 V	2x250 W	1x500 W 200 Ohm/100 V	
Nominal DC power supply	48 V DC	2x240 W	1x480 W	
Non-linear distortion factor+ noise	1 KHz 200 W		0,29 %	
Frequency range	-3 dB		90 Hz-20 kHz	
Input sensitivity	70 Hz-20 KHz		1V eff.	
Input impedance	1 kHz		10 kOhm	
Signal-noise ration	1 kHz, 250 W; volume 0,5		85	
Electronic-balanced inputs	One input for each channel (it is possible to connect both inputs, if necessary)			
Additional output contacts				
Start-up current	230 V AC	11 A with the time of thermistor restore of 70 seconds		
Consumption power	In stand-by mode	48 V DC	0,10 A	0,10 A
	In stand-by mode	230 V AC	0,058 A	0,058 A
Without signal	2 active channels	48 V DC	0,25 A	0,25 A
Without signal	2 active channels	230 V AC	0,14 A	0,14 A
Full load	Sinusoidal signal	48 V DC	12,5 A	12,5 A
Full load	Sinusoidal signal	230 V AC, 100 V, 40 Ohm	3,1 A	3,1 A
Operational specifications				
Air temperature range	From -5°C to +40°C			
Relative air humidity	From 5 to 95 %			
Size	19" 2U (482x88x256)			
Weight	16,5 kg			