Configurable Line and Distribution Amplifiers

Data Sheet

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TAL883
REF. 3948

TAL884
REF. 3949

TAL886
REF. 3450

TAL893
REF. 3975

TAL894
REF. 3973

TAL896
REF. 3974

- Caja de inyección de aluminio con excepcionales características de refrigeración.
- Indice de protección IP67 y máximo blindaje radioeléctrico.
- Tornillería de acero inoxidable.
- Fijación a pared y cable aéreo.
- Conexiones RF de entrada y salida a través de conectores pin 5/8”—24 UNEF 2A.
- Descargadores de gas en entrada/salida RF.
- Fuente de alimentación conmutada, con limitación de corriente y protección contra transitorios de entrada y sobretensiones en la salida.
- Puertas de test “F” 75 ohmios.
- Provisión para puesta a tierra.

General Description

The line amplifiers «TAL-800» Series includes line and mains powered models for 862 MHz systems, with three available splits: 30/45 MHz, 42/54 MHz and 66/86 MHz. Advanced GaAsFET amplification technology is used providing excellent output levels at high channel capacities.

The «TAL-800» amplifiers come in a tough housing with drop-down front lid. The RF amplification block and the power supply are modular and can be taken out and replaced, when required, without removing the amplifier from its location and without the need of disconnection. Both modules are available as spare parts. At the bottom of the housing four separate 5/8” cable connections can be located; please note that alternatively both input and main output connections to the amplifier can be made to the side entry ports located at the bottom left and bottom right sides of the housing.

The amplifiers come fully optioned and do not require the purchase of additional modules, with the exception of the ALSC. By simply changing the internal plug-in links to the desired position, the amplifier can be configured to include a splitter or a tap at the input and output ports. Some of the other built in options are: add pre-amplification at the forward path, disable the return path, enable or disable both input and output power passing ports, just to name a few. An Automatic Level and Slope Control module, which will deliver a constant output level over temperature, can be simply plugged into the amplifier module if required.

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			TAL-883	TAL-884	TAL-886	TAL-893	TAL-894	TAL-896
Technology					GaAsFET			
Powering Mode				Line			Mains	
Bandwidth - Forward way		MHz	45-862	54-862	86-862	45-862	54-862	86-862
Bandwidth - Reverse way		MHz	5-30	5-42	5-66	5-30	5-42	5-66
Forward way								
Input bypass		dB	-2.7 (if tap is implemented), -4.5 (if splitter is implemented)					
Response flatness		dB	± 0.75					
Nominal gain without input bypass	1 output	dB	27 [37 if preamplification is implemented]					
	2 symmetrical outputs		(2x) 22.5 [(2x) 32.5 if preamplification is implemented]					
	2 asymmetrical outputs		26 and 16 [36 and 26 if preamplification is implemented]					
Nominal gain with input bypass -2.7dB	1 output	dB	16 [26 if preamplification is implemented]					
	2 symmetrical outputs		(2x) 11.5 [(2x) 21.5 if preamplification is implemented]					
	2 asymmetrical outputs		15 and 5 [25 and 15 if preamplification is implemented]					
Nominal gain with input bypass -4.5dB	1 output	dB	22.5 [32.5 if preamplification is implemented]					
	2 symmetrical outputs		(2x) 18 [(2x) 28 if preamplification is implemented]					
	2 asymmetrical outputs		21.5 and 11.5 [31.5 and 21.5 if preamplification is implemented]					
Input attenuat.	whitout preamplifi-ca. implemented	dB	0, 3, 6, 9, 12 or 15 (4 cells or 0, 3, 6 and 9 dB)					
	whit preamplifica. implemented	dB	0, 3, or 6 (3 cells of 0, 3, and 6 dB)					
Interstage attenuation		dB	0 to 8					
Input equalization		dB	-6 to 18 (3 cells of -6, -3 and 0 dB, and 1 variable equalizer of 0-18 dB)					
Sloped response		dB	0, 6 or 12 (3 cells of 0, 6 and 12 dB)					
Output level (-60dB IMD3, DIN 45004B)		dBµV	≥ 124 (1 output), ≥ (2x) 119.5 (2 symmetrical outputs), ≥ 123 and 113 (2 asymmetrical outputs)					
Output level (-60dB IMD2, EN 50083-3)		dBµV	≥ 115 (1 output), ≥ (2x) 110.5 (2 symmetrical outputs), ≥ 114 and 104 (2 asymmetrical outputs)					
Output level (-60dB CTB, 42 ch, EN 50083-3)		dBµV	≥ 110 (1 output), ≥ (2x) 105.5 (2 symmetrical outputs), ≥ 109 and 99 (2 asymmetrical outputs)					
Output level (-60dB CSO, 42 ch, EN 50083-3)		dBµV	≥ 114 (1 output), ≥ (2x) 109.5 (2 symmetrical outputs), ≥ 113 and 103 (2 asymmetrical outputs)					
Noise figure		dB	≤ 7					
Input/Output return loss		dB	> 14					
Input test (on internal F port)		dB	-30 ±1					
Output-1 test		dB	-19 ±1					
Test salida-1		dB	-19 ±1					

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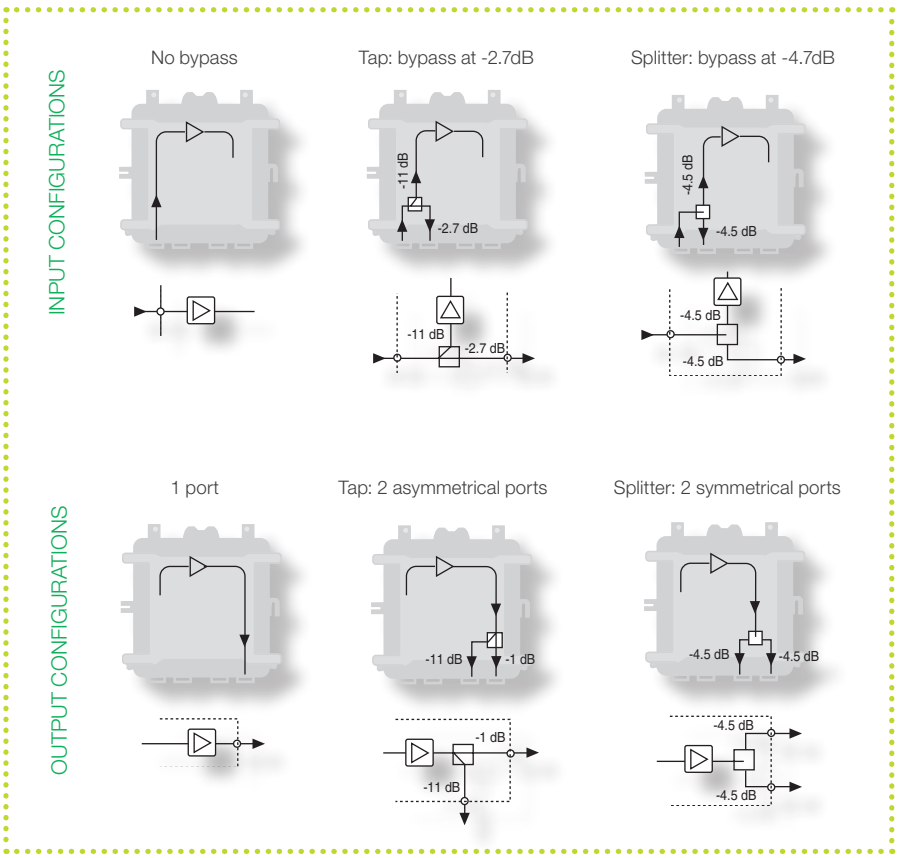
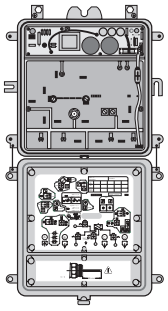
Reverse Way

Nominal gain		dB	26
Input attenuation		dB	0 to 18
Interstage attenuation		dB	0 or 6 (2 cell of 0 and 6)
Output level (-60dB IMD3, DIN 45004B)		dBµV	118 (without input bypass)
Output level (-60dB IMD2, EN 50083-3)		dBµV	106 (without input bypass)
Noise figure		dB	≤ 7
Input/Output impedance		Ω	75
Input/Output return loss		dB	≥ 16
Output test	without input bypass	dB	-30 ±1
	with input bypass -2.7 dB		-18 ±1
	with input bypass -4.5 dB		-25.5 ±1
Test salida (en puerta "F" interna)	sin bypass de entrada	dB	-30 ±1
	con bypass de entrada -2,7 dB		-18 ±1
	con bypass de entrada -4,5 dB		-25,5 ±1

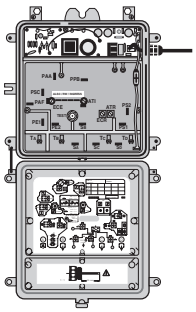
General

Powering voltage	VAC	24 - 90 (line powered models)/100 - 264 (mains powered models)
Consumption	W	21
Maximum AC/DC through current	A	7
Hum modulation, @ 7A	dB	< -70
Screening factor	dB	> 80
Dimensions		215 x 215 x 80
Weight	kg	2,1





TAL-800
line powered



TAL-800
mains powered

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