



ACE 1000 Series Distribution Amplifiers



Band-Selective Bidirectional Amplifier

The ACE 1000 series amplifier is a bidirectional amplifier designed specifically for in-building RF coverage extension for cellular or two-way trunked radio services. The small package can mount almost anywhere. Each ACE amplifier provides 30 - 40 dB of gain in each direction. An ACE pair can be used in off-air interface or a single ACE in distribution applications, along with RADIAX® or HELIAX® cables.

Ordering Information

	Amplifier No. 1	Amplifier No. 2
800 MHz Trunked Radio		
Basic Amplifier	651012-1444-100	651012-4414-200
With AGC Only	651012-1444-101	651012-4414-201
With SMART Only	651012-1444-102	651012-4414-202
With SMART/AGC	651012-1444-103	651012-4414-203
800 MHz Cellular A&B Bands		
Basic Amplifier	651013-1444-100	651013-4414-200
With AGC Only	651013-1444-101	651013-4414-201
With SMART Only	651013-1444-102	651013-4414-202
With SMART/AGC	651013-1444-103	651013-4414-203
GSM/900 MHz Trunked Radio		
Basic Amplifier	651016-1444-100	651016-4414-200
With AGC Only	651016-1444-101	651016-4414-201
With SMART Only	651016-1444-102	651016-4414-202
With SMART/AGC	651016-1444-103	651016-4414-203

Electrical Specifications – Typical

Description	800 MHz Trunked Radio		AMPS Cellular		900 MHz Trunked Radio/GSM	
	Downlink	Uplink	Downlink	Uplink	Downlink	Uplink
Frequency of Operation, MHz	851 - 869	806 - 824	869 - 894	824 - 849	935 - 960	890 - 915
Gain, dB	30 - 40	30 - 40	30 - 40	30 - 40	30 - 40	30 - 40
Amplifier No. 1						
3rd Order Intercept, dBm	+27	+40	+27	+40	+27	+40
1 dB Compression Point, dBm	+17	+30	+17	+30	+17	+30
Noise Figure, dB	11	9	10	10	—	—
Amplifier No. 2						
3rd Order Intercept Point, dBm	+40	+27	+40	+27	+40	+27
1 dB Compression Point, dBm	+30	+17	+30	+17	+30	+17
Noise Figure, Amp No. 2, dB	9	11	—	—	10	10
Pass Band Ripple, dB	<4	<4	<4	<4	<4	<4
VSWR	2:1	2:1	2:1	2:1	2:1	2:1
Input Voltage, Vac, 47 - 70 Hz	90 - 260	90 - 260	90 - 260	90 - 260	90 - 260	90 - 260
Power Consumption, watts	50	50	50	50	50	50
Enclosure Type	NEMA4 (IP66)	NEMA4 (IP66)	NEMA4 (IP66)	NEMA4 (IP66)	NEMA4 (IP66)	NEMA4 (IP66)
Size, in (mm)	13 x 9.9 x 4.8 (330 x 251 x 122)	13 x 9.9 x 4.8 (330 x 251 x 122)	13 x 9.9 x 4.8 (330 x 251 x 122)	13 x 9.9 x 4.8 (330 x 251 x 122)	13 x 9.9 x 4.8 (330 x 251 x 122)	13 x 9.9 x 4.8 (330 x 251 x 122)
ac Power Inlet	TURCK® RSF30	TURCK® RSF30	TURCK® RSF30	TURCK® RSF30	TURCK® RSF30	TURCK® RSF30
RF Connectors	Type N Female	Type N Female	Type N Female	Type N Female	Type N Female	Type N Female
Operating Temperature Range, °C (°F)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)	-20 to 50 (-4 to 122)

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