

Features

From 150 kHz - 250 MHz

Suitable for IEC-61000-4-6 testing

Automatic Safety Shutoff



Description

The Com-Power ACS-230 series of broadband RF amplifiers; diverse in application, yet specifically geared for use in IEC 61000-4-6 immunity testing using coupling decoupling networks (CDN).

The ACS-230-series models are engineered to provide high gain, with excellent efficiency and reliability, at an unbeatable price. It complementing Com-Power's full line of Coupling/Decoupling Networks (CDN's) and related test and calibration accessories. It easily achieves 3 Vrms or 10 Vrms test levels with any compliant coupling network (CDN, EM Clamp, Injection Probe, etc.) The ACS-230-series amplifiers comply with all required technical specifications for IEC 61000-4-6 compliance testing, yet its low cost makes it affordable even as part of a pre-compliance testing solution.

These amplifiers are individually tested to make sure that they meet the technical requirements given in IEC-61000-4-6 before shipment. The amplifiers can be also supplied with a matched CDN and test accessories for a complete solution. Optional software to automate the conducted immunity testing is also available. All Com-Power products come with a 3 year warranty.

Application

The required test levels per IEC 61000-4-6 (given in the table below) that can be achieved using the ACS series power when properly configured with a compliant coupling decoupling network from Com-Power or another manufacturer. Please refer to IEC 61000-4-6 for information on test setup, procedures and test accessories needed.

Test Level Volts (Vo)	umr (150) Volts	umr (150) Volts (dBm)
1	0.167	-2.5
2	0.5	7
3	1.67	17.5

Vo = Open circuit voltage in 150Ω system.
umr = Voltage level measured at the output of the 150Ω to 50Ω adapter (ADA-515).

Test accessories available from Com-Power:

- 150Ω to 50Ω adapter (ADA-515)
- 50Ω terminator (TEP-050)
- CDN shorting Adapter (ADA-xx)
- Directional Couplers - (DCU & DCD series)
- Attenuator - ATTN-X- series

Specifications

MODEL	ACS-230-25W	ACS-230-50W	ACS-250-100W
Frequency Range	150 kHz to 230MHz	150 kHz to 230 MHz	150 kHz - 250 MHz
Rate Power Output	25 Watts into 2:1 VSWR	50 Watts into 2:1 VSWR	100 Watts into 2:1 VSWR
Gain	43 dB \pm 2	47 dB \pm 2	50 dB \pm 2
Input for rated output	0 dBm	0 dBm	0 dBm
Automatic Safety Shutoff	30 Watts \pm 2	50 Watts \pm 2	140 Watts
P1dB	NA	NA	No compression until 100 W
INPUT			
Impedance	50 Ohm (nominal)	50 Ohm (nominal)	50 Ohm (nominal)
VSWR			
Input Signal Modulation Compatibility	AM, FM, Pulse	AM, FM, Pulse	AM, FM, Pulse
Connector	50 Ohms	50 Ohms	50 Ohms
OUTPUT			
Impedance	50 Ohm (nominal)	50 Ohm (nominal)	50 Ohm (nominal)
VSWR	1:7 max	1:7 max	1:7 max
Harmonic distortion	-20 dBc at 25 Watts	17 dBc at 50 Watts	15 dBc at 100 Watts
Mismatch tolerance	Auto shut off @ VSWR >7	Auto shut off @ VSWR >7	Auto shut off @ VSWR >7
Connector	Type N front panel	Type N front panel	Type N front panel
POWER			
AC Single Phase	100-240 VAC 50/60 Hz	100-240 VAC 50/60 Hz	100-240 VAC 50/60 Hz
LCD DISPLAY			
Front panel Display (column 1)	Current	Current	Current
Front panel Display (column 2)	Temperature	Temperature	Temperature
Front panel Display (column 3)	Load VSWR, RF Power input/output, Gain	Load VSWR, RF Power input/output, Gain	Load VSWR, RF Power input/output, Gain
INTERFACE	USB	USB	USB
MECHANICAL			
Cooling	Forced air (integ. fan)	Forced air (integ. fan)	Forced air (integ. fan)
Size			
Weight	19 inch rack 2U	19 inch rack 3U	19 inch rack 4U
Operating Temperature	0° C to 40°C	0° C to 40°C	0° C to 40°C

All specifications are subject to change without notice.
All values are typical, unless specified.