



DSR 400 Series Dropout, Surge, Ripple Simulator and AC/DC Voltage Source



- Complete single-box solution for DO 160 Section 16 (115V, 14VDC, 28VDC) and MIL STD 704
- Includes pre-entered Aviation Standards' test routines
- Operate as a free-standing system using the included monitor, keyboard and mouse, or control via LAN
- Very easy to modify existing tests or build new test sequences
- Can function as a controller or node in a larger test system via built-in LAN and GPIO controls
- Models with 80A or 160A continuous output current available
- Both the 80 and 160 models allow the choice of either Siglent (model SDG 2042X) or Keysight (model 33511B) arbitrary waveform generator, with the Keysight configuration providing TAA compliance

STANDARDS TESTING LIST: AVIATION STANDARDS

Boeing-D6-16050-5-C
DO160G Section 16
DO160G Section 18
DO160G Section 19
MIL STD 704F

Key Performance Capabilities:

4 Quadrant – Can source and sink current
 $\pm 400V$ – Supply for 12V – 48V DC systems and 115V – 240V AC systems
50 kHz Sine – DC ripple tests for many standards
3m Ω DC source impedance – better than ISO 7637-2 requirements
Supports ground reference and supply offset testing required for ISO 16750-2 Sect. 4.8 and other similar standards

AE Techron's DSR 400 Series systems provide complete, single-box solutions for immunity testing. This includes a simple-to-use yet powerful standards waveform generator, an industry-standard arbitrary waveform generator, plus an industry-leading power supply technology. They come with an extensive library of tests for many automotive and aviation standards.

All DSR 400 Series models are 4-quadrant, allowing them to source and sink current. The DSR Series has power in reserve; each model provides continuous DC power as rated, and is able to provide 5X rated power for in-rush testing up to 200 ms, as is required in DO 160 Section 16.

DSR 400-80

Voltage Output Range: -400V to +400V Max
Output Current: 0A to 80A continuous
Peak Current: 150A for 200 ms
Bandwidth (-3dB): DC to 50 kHz
Source Impedance: 3 mΩ + 3 μH
Supply Voltage: Single-phase 208V ±10%, 30A, 50/60 Hz; 230V/240V ±10%, 30A version available
Dimensions (HxWxD): 34.55 x 22.22 x 30.29 inches (87.76 x 56.44 x 76.94 cm)
Weight: Approximately 225 lbs. (102 kg)

DSR 400-160

Voltage Output Range: -400V to +400V
Output Current: 0A to 160A continuous
Peak Current: 300A for 200 ms
Bandwidth (-3dB): DC to 50 kHz
Source Impedance: 3 mΩ + 3 μH
Supply Voltage: 3-phase 208V ±10%, 30A, 50/60 Hz; 400V ±10%, 30A version available
Dimensions (HxWxD): 48.55 x 22.22 x 30.29 inches (123.32 x 56.44 x 76.94 cm)
Weight: Approximately 325 lbs. (147 kg)

Common Data (all models)

Operation: 4-quadrant, bi-polar operation
Output Rise Time: <30 μS
Remote Control: GPIO, LAN
Cooling: Internal forced-air fans
Protection: Over/under voltage, over current, over temperature
Trigger: Automatic repeat, manual trigger, external trigger via GPIO or LAN
Input, Signal In: BNC connector; **LAN:** Ethernet connector
Output, DUT Supply +/-: High-current connectors; **Signal Output:** BNC connector; **LAN:** Ethernet connector

Waveforms: Sine wave sweep, ripple (cranking), DC source, triangle wave, square wave, sawtooth wave
Control Functions: Trigger, fixed loop, variable loop, template playback, GPIO output, LAN output
Operating Environment,
Temperature: 10°C to 50°C (50°F to 122°F), Maximum Output Power de-rated above 30°C (86°F).
Humidity: 70% or less, non-condensing
Atmospheric Pressure: 86 kPa (860 mbar) to 106 kPa (1,060 mbar)



230V & 400V versions of this product bear the CE mark



DSR 400-80K and DSR 400-160K are TAA Compliant

AE Techron Sales Representative