



32 Channel module for use in Vektrex driver systems or used as a benchtop system. Comes with easy-to-use Control Panel software.

- Reliable, Accurate Current
- 32 Independent Programmable Source Channels
- Built-in voltage monitoring and logging
- Scalable; easily add to existing SpikeSafe-based systems or build up a new one
- Patented SpikeSafe LED Protection
- Ideal for high voltage, low current devices

300V, 100mA MULTI-CHANNEL DC CURRENT SOURCE

CONFIGURATION

32 CHANNEL/MODULE

DRIVE CAPABILITY

DC CONSTANT CURRENT

960W

300V

20-100mA



OVERVIEW

The SS300 DC is a high quality and reliable current source developed and optimized for LED reliability stress applications; it provides a flexible, scalable foundation that meets stringent LED test protocols. The SS300 DC is designed for use in Vektrex reliability systems and it can also be used for other applications requiring multiple current sources.

HIGH POWER DENSITY

The SpikeSafe Series offers the highest power density in the industry. Each SS300 DC sources approximately 1kW. With 300V compliance, the SS300 is ideal for driving series LED circuits of high voltage LEDs. For example, an SS300 can power 128 64 LEDs configured as 32 circuits of 4 LEDs.

INDEPENDENT PROGRAMMABLE SOURCE CHANNELS

The SS300 DC provides 32 source channels. Source channels are software controlled with individual settings for current, compliance voltage and SpikeSafe protection parameters. This flexibility allows one SS300 to test a variety of LEDs at many different current settings.

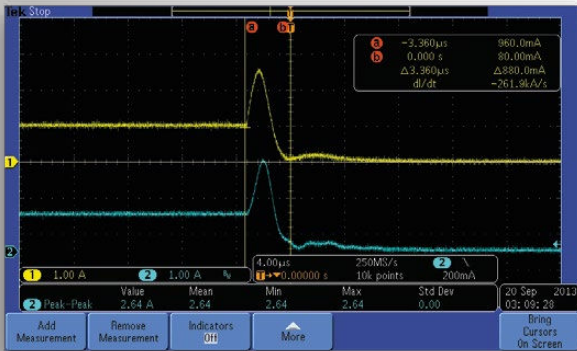
COMPATIBLE FORM FACTOR

The SS300 DC has the same form factor as the SS200 and SS400 current source modules. Current output is provided on four 16 pin connectors compatible with existing Vektrex cables. The SS300 DC may be controlled with Control Panel or STARS software applications. Together these features allow the SS300 DC to co-exist seamlessly with other Vektrex current sources in LED driver systems.

APPLICATIONS

- LED Reliability, Burn-in
- LM-80
- AC LEDs
- High Voltage LEDs
- Low power LEDs

300V, 100mA MULTI-CHANNEL DC CURRENT SOURCE



SpikeSafe 4uS shutdown in 10 LED circuit due to single LED failure

SpikeSafe™ LED Protection

SpikeSafe proprietary protection algorithms continuously monitor voltage and current on all source channels for anomalies. If an anomaly is detected, drive to the affected source channel is immediately terminated. This rapid shutdown preserves the individual device for failure analysis, and it ensures other devices in the circuit are not damaged, ultimately improving overall reliability.

SPIKESAFE 300 DC MODEL NUMBERS

MODELS	100mA
300V	SS300-DC-300-0.1-X32

CURRENT SOURCE PERFORMANCE

Mode	DC Constant Current
Output Current	20mA-100mA
Maximum Compliance Voltage	300V
Output Power	960W/module; 30W/source channel
Output Current Accuracy	0.5% +0.5mA
Calibration Interval	1 year after put into service
Device Protection	SpikeSafe patented protection including high speed over current shut down, slow start up, leakage detection and other protection algorithms.
Output Current Ripple	200uA p-p typical at 50mA

PHYSICAL AND ENVIRONMENTAL

Available Packages	Individual module suitable for Benchtop or Rackmount; Integrated system of 32 to 1024 source channels.
Operating Conditions	10 to 35C, 70% R.H. , Air cooled
Input Power	Selectable; single and three phase available; 50-60HZ
Particulate Level	Clean lab conditions

OUTPUT CONFIGURATION

Current Sources	32 independent source channels
Type	Differential drive (anode and cathode driven)

REMOTE CONTROL

Physical	Ethernet
Protocol	TCP/IP
Command Set	SCPI

MONITORING SYSTEM

Type	Built-in data acquisition system monitors voltage, current and fault conditions.
Voltage Monitoring Accuracy	1%+2V
Current Readback Accuracy	1.5%+0.5mA

ISOLATED CONTROL INPUTS

Pause	Pauses current output
Disable	Halts current output