

# Diamond<sub>x</sub> DPS16

## 16-Channel Device Power Supply



The DPS16 is a high-performance 16-Channel power supply instrument for the Diamondx. There are 16 continuous voltage supplies on each DPS16 device power supply instrument.

### Highlights

- Continuous voltage source
- Voltage and current measurement
- Diamond software support

### Features

- Fully parallel 16-Channel device power supply information provides a cost-effective solution for multisite testing
- A 6 V force and measure range and up to 2 A output current meets the requirements of most digital and mixed-signal consumer devices
- Channels can be ganged to achieve up to 16 A for devices with higher current demands
- Four current ranges enable better accuracy



Automotive



Consumer



Power Management



IoT/loV & Optoelectronics



Industrial & Medical



MCU



Mobility

- 16 Digital Channels per instrument
- Measurement delay up to 4k sample frequency
- 6 V range for sourcing and measuring voltage
- 7 different measurement setups storage

# Diamond<sub>x</sub> DPS16

## 16-Channel Device Power Supply

### Continuous Voltage Source

Each DPS16 channel has a 6 V range for sourcing and measuring voltage. For better accuracy, there are four different current ranges for the programmable current limit. Up to eight channels can be ganged to achieve a higher current limit of up to 16 A.

### Voltage and Current Measurement

The DPS16 supports both voltage and current measurements. The user may specify a measurement delay, up to 4k sample frequency. Seven different measurement setups can be stored by the user to streamline test program execution times.

### Diamond Software Support

The Diamond Series has a full suite of software tools for test creation. Debug, characterization and high-volume production. Interaction tools can be used to view and modify DPS16 settings, as well as the settings of the full range of other instruments available for use with Diamond Series.

## General

- Channels Per Instrument: 16
- Force/Measure Voltage Range: 0 V to 6 V
- Force Resolution: 13 bits
- Measure Resolution: 16 bits
- Maximum Output Current: 2 A per channel, gangable to 16 A
- Current Ranges: 200  $\mu$ A, 2 mA, 200 mA, 2 A
- Current Ranges Resolution: 16 bits
- Capacitive Load: 100  $\mu$ F Maximum
- Measure Memory: 4 kS/Channel Accuracy
  - Accuracy of V Force / V Measure:  $\pm(0.1\%$  of value + 3mV)
  - Accuracy of I Measure:  $\pm(0.2\%$  of value + 0.1% of range)

All specifications are subject to change without notification and are for reference only. For detailed performance specifications, please contact Cohu.