

# Dual Power Supply

## DPS16

- Dual Channel Power Supply
- Low output noise
- 16 bit resolution
- +/-12V output range
- 2 or 4-wire output configuration
- 200mA max. with programmable current limit
- Modulation capability for PSRR measurements
- 10ms settling time
- For ATX series hardware platform



The DPS16 is a dual-channel power supply with very low output noise and no ripple. The output current can be up to 200mA and has a programmable current limit. The 4 wire capability provides an excellent load regulation.

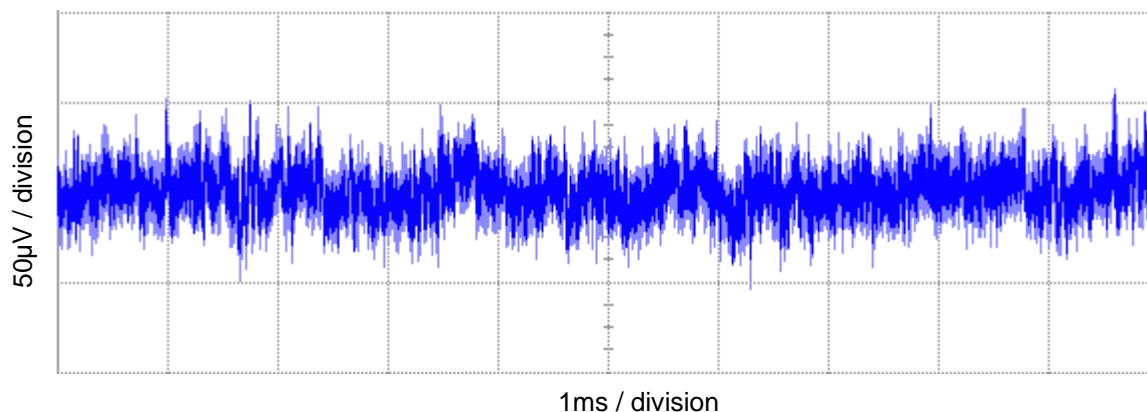
Because the DPS16 is a fully linear design the output noise is exceptionally low while there are no ripple components as usually seen with switched mode designs.

The unit has voltage and current read back on both channels with 16-bit resolution.

A targeted feature of the DPS-16 is the ability to modulate the output allowing to perform PSRR measurements.

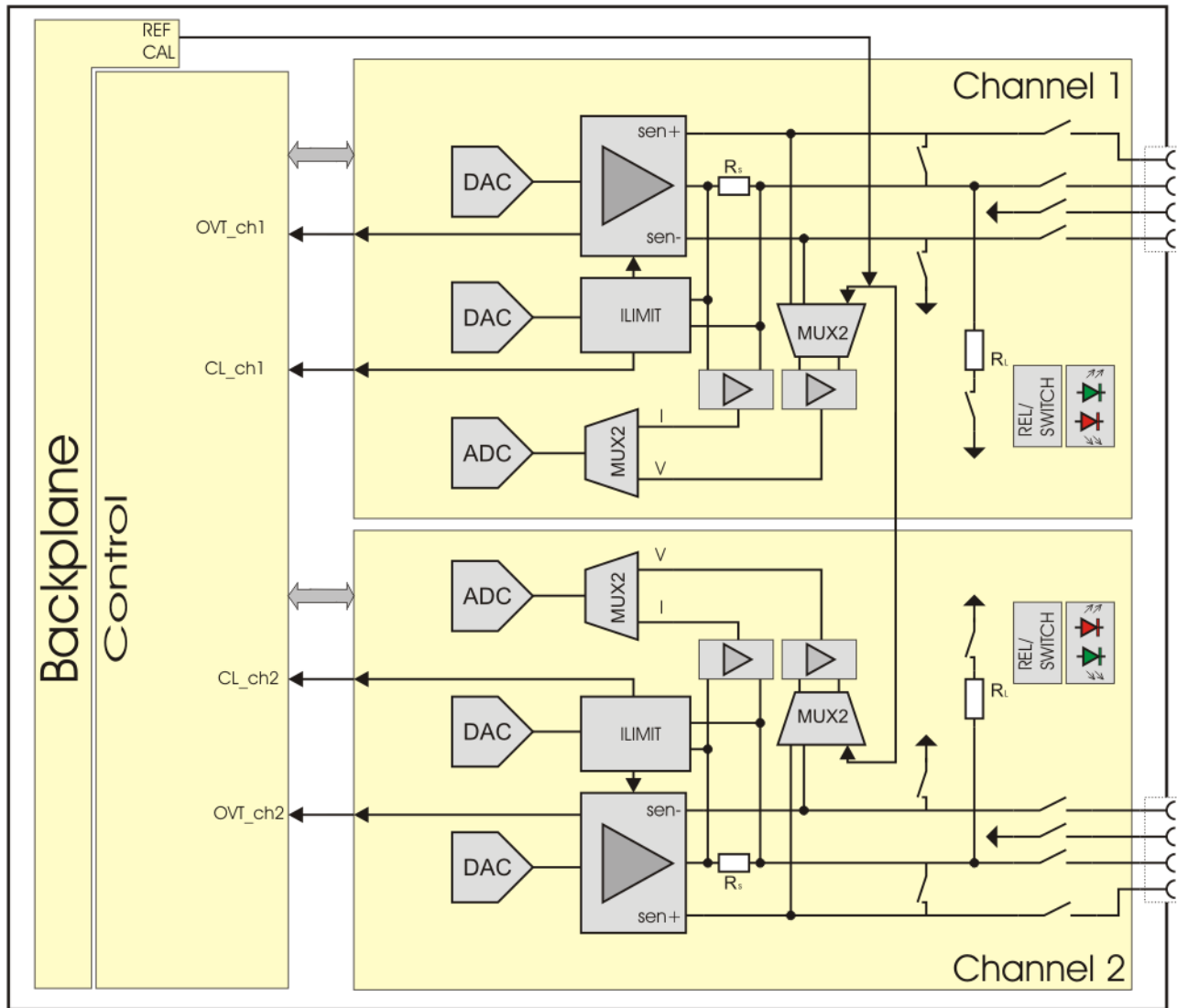
The unit is very suitable for precision analog and Mixed Signal measurements.

**Output noise at 5V/100mA, BW= DC to 100kHz**



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## Block diagram



## Specifications (conditions: after 1 hour warm-up, $T_A=25^\circ\text{C}$ )

### General

Channels	2
Resolution	16-bit
Output range	-12V to +12V
Output configuration	2 or 4-wire
Output current	200mA
Current Limit Range	10mA - 200mA
Current Limit Resolution	220uA
Settling time	10ms
Measurement Modes	Voltage, Current
Measure Resolution	16-bit

### Accuracy

Accuracy	$\pm(4\text{mV}+0.2\% \text{ of Value})$
Load regulation (typical)	10 $\mu\text{V}/\text{mA}$
Output noise (typical)	18 $\mu\text{V}_{\text{rms}}$ (DC to 100kHz)
0.1Hz to 10Hz noise (typical)	15 $\mu\text{V}_{\text{pp}}$
Current read back accuracy	$\pm(1\text{mA}+1\% \text{ of reading})$

### Output modulation

Voltage Output Modulation	1mHz – 1kHz
Modulation slew rate	1V/ms max.