

DDPCA-300 Sub-Femto Ampere Sensitivity

Model	DDPCA-300									
Transimpedance [V/A]	10 ⁴	10 ⁵	10 ⁶	10 ⁷	10 ⁸	10 ⁹	10 ¹⁰	10 ¹¹	10 ¹²	10 ¹³
Bandwidth* (-3 dB) [Hz]	400	400	400	400	150	150	20	20	1	1
Rise Time* (10 % - 90 %) [ms]	0.8	0.8	0.8	0.8	2.3	2.3	17	17	350	350
Equ. Input Noise [fA/√Hz]	45 pA	45 pA	0.45 pA	0.45 pA	15 fA	15 fA	1.3 fA	1.3 fA	0.2 fA	0.2 fA
Accuracy	Transimpedance (Gain) ±1 %									
Low Pass Filter	3 settings: full bandwidth, 0.7 Hz and 0.1 Hz									
Output Range	±10 V, ±30 mA									
Bias Voltage Range	±10 V, max. 10 mA, connected to amplifier input, adjustable by trimpot or remote control voltage									
Power Supply	±15 V, +70 mA / -15 mA typ.									
Control Interface	4 opto-isolated digital inputs, TTL/CMOS compatible, analog voltage input for bias control									
Case	170 x 60 x 45 mm (L x W x H), weight 320 g (0.74 lbs)									

* The values for bandwidth, rise time and integrated input noise stated in the table above are achieved with the low pass filter set to full bandwidth. Lower noise values can be achieved by setting the low pass filter to 0.7 Hz or 0.1 Hz. The minimum of 0.4 fA peak-to-peak noise is achieved in the gain settings 10¹² and 10¹³ V/A with the low pass filter set to 0.1 Hz.

Offset adjustable by potentiometer. Overload indication by LED and digital control output. Input protected against ±2 kV transients. Output short-circuit protected. Power supply via 3-pin Lemo® socket, a mating connector is provided with the device. Optional power supply PS-15 available. For further information please view the datasheet or contact FEMTO®.

CURRENT AMPLIFIERS

VOLTAGE AMPLIFIERS

**GHZ-WIDEBAND
AMPLIFIERS**

PHOTORECEIVERS

LOCK-IN AMPLIFIERS

ACCESSORIES