

Unless otherwise specified, output current:  $\pm 0.1$  A**LP5394** SPECIFICATIONS

Output voltage	0 to $\pm 15$ V
Voltage setting range	Set with the VOLTAGE RANGE switch on the front panel Setting range 3 V 0 to $\pm 3$ V Setting range 5 V 0 to $\pm 5$ V Setting range 10 V 0 to $\pm 10$ V Setting range 15 V 0 to $\pm 15$ V
Voltage setting method	Set with the adjuster on the front panel (VOLTAGE ADJUST dial that turns in 10 turns) The voltage can be adjusted from 0 V to the full-scale The full-scale voltage is output when in dial setting 10. The minimum scale on the dial is 0.2% of the full-scale voltage
Voltage setting accuracy	$\pm 1\%$ of full-scale voltage in dial settings 1 to 10 0 $\pm 20$ mV in dial setting 0
Maximum current	$\pm 0.1$ A
Output ON/OFF	Set with the front panel switch
Voltage meter	Class 2.5, full-scale 15 V with POLARITY switch
Output monitor	Set with the MONITOR terminal on the front panel (Zout = 1 k $\Omega$ )
Input regulation	Within $\pm 3.5$ mV (for power supply $\pm 10\%$ )
Load regulation	Within $\pm 10$ mV (load 0% reference for load 0 to 100%)
Ripple noise	10 $\mu$ Vrms or lower (typ.) (load 0 to 100%, bandwidth 10 Hz to 20 MHz)
Output voltage temperature coefficient*1	$\pm 10$ ppm/ $^{\circ}$ C (typ.)
Time drift*1	$\pm 40$ ppm (typ.) (8 hours after warm-up)
Output connector	HR10-7R-4S (73) (on the front panel) Hirose Electric
Input voltage	AC 100, 120, 220 and 240 V (selector switch) $\pm 10\%$ However, AC 250 V or lower
Frequency	50 Hz/60 Hz $\pm 2$ Hz
Power consumption	25 VA or lower
Oversvoltage category	II
Insulation resistance	Between all power inputs and chassis 50 M $\Omega$ or more (with DC 500 V) Between all power inputs and outputs 50 M $\Omega$ or more (with DC 500 V) Between output GND and chassis 10 M $\Omega$
Withstanding voltage	Between all power inputs and chassis AC 1500 V for 1 minute Between all power inputs and outputs AC 1500 V for 1 minute Between output GND and chassis $\pm 42$ Vpk (DC + ACpeak)
Protection functions	Overcurrent protection Drooping characteristic (approx. 0.15 A) self-recovery type Overcurrent status indication By the front panel +OCP LED and -OCP LED Overheat protection Output is turned off at an internal temperature of approx. 75 $^{\circ}$ C Overheat status indication Front panel OUTPUT OFF LED flashes (self-recovery)
Operating temperature range	0 to +50 $^{\circ}$ C (day's average temperature 40 $^{\circ}$ C or lower)
Operating humidity range	25 to 80% RH absolute humidity 1 to 25 g/m $^3$ , non-condensation
Storage temperature range	-10 to +50 $^{\circ}$ C (day's average temperature 40 $^{\circ}$ C or lower)
Storage humidity range	25 to 80% RH absolute humidity 1 to 29 g/m $^3$ , non-condensation
Cooling method	Natural convection cooling
Pollution degree	2 (indoor use)
Warm-up time	30 minutes
Dimensions (mm)	107(W) $\times$ 86(H) $\times$ 330(D) (without protrusions)
Weight	Approx. 1.75 kg (without accessories)
RoHS	Directive 2011/65/EU
EMC	EN 61326-1: 2013 (Group 1, Class A) EN 61000-3-2: 2006 + A1: 2009 + A2: 2009 EN 61000-3-3: 2013
Safety	EN 61010-1: 2010
Accessories	Power cord set (3 pole, 2 m), Fuse (100 V/120 V: 0.315 A or 220 V/240 V: 0.125 A) (Time-lag, $\phi 5.2 \times 20$ mm), Instruction manual

\*1 For the full-scale voltage of the range.

**LP5393** SPECIFICATIONS

Output voltage	$\pm 12$ V to $\pm 15$ V
Voltage setting	$\pm 15$ V $\pm 1\%$ when adjuster turned all the way to right $\pm 12$ V $\pm 1\%$ when adjuster turned all the way to left
Voltage setting method	Set with the front panel adjuster
Maximum current	$\pm 0.1$ A
Output ON/OFF	Set with the front panel switch
Output monitor	Set with the MONITOR terminal on the front panel (Zout = 1 k $\Omega$ )
Input regulation	Within $\pm 3.5$ mV (for power supply $\pm 10\%$ )
Load regulation	Within $\pm 15$ mV (load 0% reference for load 0 to 100%)
Ripple noise	10 $\mu$ Vrms or lower (typ.) (load 0 to 100%, bandwidth 10 Hz to 20 MHz)
Output voltage temperature coefficient	$\pm 20$ ppm/ $^{\circ}$ C (typ.)
Time drift	$\pm 50$ ppm (typ.) (8 hours after warm-up)
Output connector	HR10-7R-4S (73) (on the front panel) Hirose Electric
Input voltage	AC 100, 120, 220 and 240 V (selector switch) $\pm 10\%$ However, AC 250 V or lower
Frequency	50 Hz/60 Hz $\pm 2$ Hz
Power consumption	25 VA or lower
Oversvoltage category	II
Insulation resistance	Between all power inputs and chassis 50 M $\Omega$ or more (with DC 500 V) Between all power inputs and outputs 50 M $\Omega$ or more (with DC 500 V) Between output GND and chassis 10 M $\Omega$
Withstanding voltage	Between all power inputs and chassis AC 1500 V for 1 minute Between all power inputs and outputs AC 1500 V for 1 minute Between output GND and chassis $\pm 42$ Vpk (DC + ACpeak)
Protection functions	Overcurrent protection Drooping characteristic (approx. 0.15 A) self-recovery type Overcurrent status indication By the front panel +OCP LED and -OCP LED Overheat protection Output is turned off at an internal temperature of approx. 75 $^{\circ}$ C Overheat status indication Front panel OUTPUT OFF LED flashes (self-recovery)
Operating temperature range	0 to +50 $^{\circ}$ C
Operating humidity range	5 to 85% RH absolute humidity 1 to 25 g/m $^3$ , non-condensation
Storage temperature range	-10 to +60 $^{\circ}$ C
Storage humidity range	5 to 95% RH absolute humidity 1 to 29 g/m $^3$ , non-condensation
Cooling method	Natural convection cooling
Pollution degree	2 (indoor use)
Warm-up time	30 minutes
Dimensions (mm)	107(W) $\times$ 86(H) $\times$ 330(D) (without protrusions)
Weight	Approx. 1.7 kg (without accessories)
RoHS	Directive 2011/65/EU
EMC	EN 61326-1: 2013 (Group 1, Class A) EN 61000-3-2: 2006 + A1: 2009 + A2: 2009 EN 61000-3-3: 2013
Safety	EN 61010-1: 2010
Accessories	Power cord set (3 pole, 2 m), Fuse (100 V/120 V: 0.315 A or 220 V/240 V: 0.125 A) (Time-lag, $\phi 5.2 \times 20$ mm), Instruction manual

Note: The contents of this catalog are current as of June 18th, 2019

\*Products appearance and specifications are subject to change without notice.

\*Before purchase contact us to confirm the latest specifications, price and delivery date.

# NF Corporation

**Head Office**

6-3-20 Tsunashima Higashi, Kohoku-ku, Yokohama 223-8508, Japan

<http://www.nfcorp.co.jp/english/>**NF Techno Commerce Co., Ltd.** International Sales Division

6-3-14 Tsunashima Higashi, Kohoku-ku, Yokohama 223-0052, Japan

Phone : +81-45-777-7604 Fax : +81-45-777-7605