## LKK-PSU-12PF-1.25

Power Supply Unit with 12-pin Hirose equivalent connector



UL (E ROHS FC







### **OUTPUT SPECIFICATIONS**

Power Output			
Output Voltage	+12V DC ±5%	Peak	_
Min.Load	0A	Output Power (Max.)	28.8W
Output Load (Max.)	2.4A		

Combined Load/Line Regulation			
Voltage	+12V DC	Load Regulation	11.4V - 12.6V
Min.Load	0A	No load	11.4V - 12.6V
Max. Load	2.4A		

#### **Ripple And Noise**

Max. 120mVp-p (ripple), 240mVp-p (noise), measured at rated voltage and full load, with a 20MHz bandwidth oscilloscope and parallel 47 $\mu$ F electrolytic + 0.1 $\mu$ F ceramic capacitors across the output terminals

Voltage	+12V DC	Ripple	120mVp-p
Noise (Max.)	240mVp-p		

#### **Efficiency**

≥ 87% at 115V AC under full load ≥ 87% at 230V AC under full load

# **ENVIRONMENTAL CONDITIONS**

Operating Temperature	
Ambient Temperature	0°C to 40°C
Relative Humidity	10% to 90% RH
Vibrations	1.0mm, 10-55Hz, 15minutes per each axis (X,Y,Z)

Storage Conditions (With Packaging)	
Ambient Temperature	-20°C to 85°C
Relative Humidity	10% to 90% RH
Vibration and Shock	The power supply is designed to withstand regular transportation vibrations per MIL-STD-810F, Method 514
Drop Test	1 meter drop on 1 corner, 3 edges, 6 faces (in packaging)

## **PROTECTION FEATURES**

Short Circuit Protection	The power supply immediately shuts down when an over-current or short-circuit is detected and automatically restarts once the fault condition is removed.
Overload protection	The output voltage is protected during over-voltage conditions and automatically recovers once the fault is cleared

# **SAFETY AND COMPLIANCES**

Certifications	UL, FCC, PSE, CE EMC, RoHS
Hi-Pot Test	3000V AC, 10mA, 1s (Primary to Secondary)
Surge Immunity	1kV

## **POWER UNIT**

Power Unit Dimensions	35 mm x 55 mm x 123 mm (H x W x L) (±1.0mm)
Connector	12-pin Hirose HR10A-10P-12S (or equivalent)
Cable Length (Connector Side)	1200 mm (±20.0 mm)
Minimum Bend Radius	35 mm

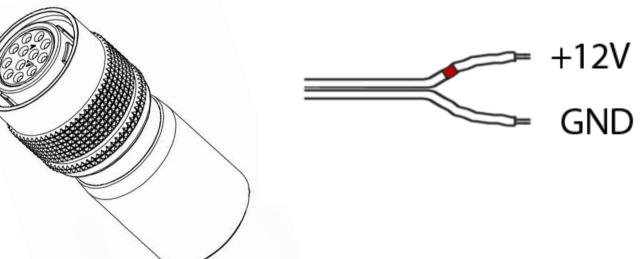
#### **Connector Pin-out**

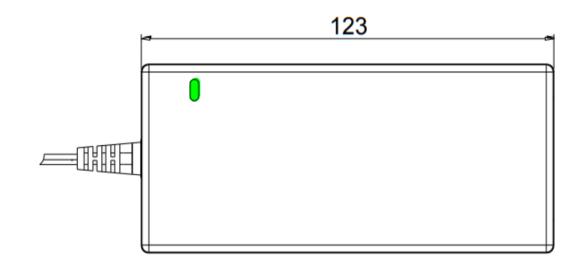


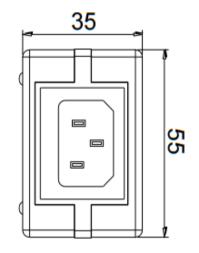
Pin	Signal
1	GND
2	+12V DC
3	NC
4	NC
5	NC
6	NC
7	NC
8	NC
9	NC
10	NC
11	NC
12	NC

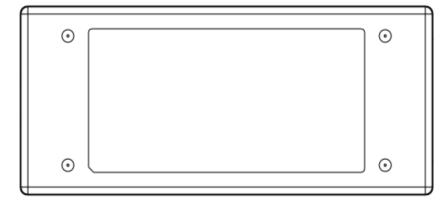


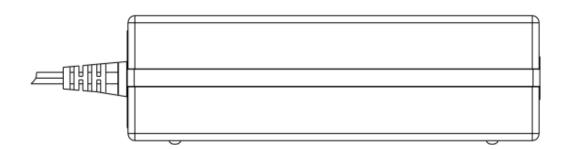
Flying Leads (excl. 12-pin connector)













# **AVAILABLE POWER CORDS**

Type A (US/Japan	
Part Number	LKK-PSU-PWR-A-1.2
Cord Length	1200 mm (±20.0 mm)
Wire Type	2468 22AWG, 80°C, VW-1, 300V, Ø4 mm
Type C (EU)	
Part Number	LKK-PSU-PWR-C-1.5
Cord Length	1500 mm (±20.0 mm)
Wire Type	2468 22AWG, 80°C, VW-1, 300V, Ø4 mm
Type I (China/Australasia)	
Part Number	LKK-PSU-PWR-I-1.2
Cord Length	1200 mm (±20.0 mm)
Wire Type	2468 22AWG, 80°C, VW-1, 300V, Ø4 mm

