# 100 Watt HY Series

# Shindengen 🙌 America, Inc.



## **SPECIFICATIONS**

#### INPUT

Input Noise Tolerance Line-Neutral 1000V 800 nS Voltage 85 - 132 / 170 - 264VAC (auto selection) Line-Line 1000V 800 ns Frequency 47 - 63 Hz (connected equipment will continue to function Current and protection equipment will not activate falsely) Full Load 100 VAC - 2.4A (RMS) 200 VAC - 1.4A (RMS) Lightning Surge Tolerance 1200V peak, 1 msec rise time from 10% to 90% Inrush 100 VAC - 15A load. 40 msec decay from 90% to 10% load. 200 VAC - 30A (power supply will not be damaged, nor OUTPUT will its protection circuits activate falsely) Regulation **ESD** Tolerance Total ±3% FG Terminal-Cover 10 KV (ESD probe fitted with 500 pf and Line (static) ±0.1% 100 ohms in parallel with probe output) Line (dynamic) ±0.4% (power supply will not be damaged, nor Load (static) +0.5%will its protection circuits activate falsely) Load (dynamic) ±0.7% (for ±10% change of nominal Remote Sense Control Circuit automatically compensates for output current) up to 0.5V lead drop. Drift ±0.5% (for 8 hours after 10 min. warm-up) Temp. Coefficient ±0.02% INSULATION Ripple & Noise (peak-to-peak)

1% +70 mV max. (measured at 25°C with a bandwidth of 50 MHz) Hold-up Time 16 mS min. (measured at 100 VAC, full load, 25°C) **Rise Time** 300 mS max. (measured at 100 VAC, full load, 25°C) Converter Topology **Resonant Converter Operating Frequency** 450 KHz

#### PROTECTION

Overvoltage	All models are protected against overvoltage.					
	Control circuit is preset so output voltage does					
	not exceed the following values:					
	Output V	5	12	24		
	Max. OVP	6.9	15.5	31.0		
Overload	All models are protected against overload. The control circuit has a foldback characteristic with					
	the knee set at 110% of full-rated load.					
	Recovery is automatic after removal of					
	the fault.					

#### **FEATURES**

- Low Profile – 1.2" High
- Wide Range Input
- Meets International Safety and EMI Specifications
  - -UL 1950 Recognized
    - -CSA 22.2 No. 234 Certified
    - -EN 60950(TUV Certified)
    - -Independently Tested to FCC Part 15 Class B. VDE 0871 Class B and VCCI Class 2. -CE
- MTBF > 300.000 Hours
- 5, 12 or 24 Volt Models
- **Totally Enclosed**
- LED Indicator
- Hyper-Resonant Converter
- Remote Sense, Remote On/Off

All models meet the requirements of UL1950, CSA 22.2 No. 234, and EN60950 for Input-to-Chassis, Input-to-Output, Output-to-Chassis and Leakage Current specifications. See Engineering Section.

#### **ENVIRONMENT**

-10 to +40°C at full load. Operating Temp. Storage Temp. -25 to +85°C **Operating Humidity** 10 - 90%, (non-condensing) Storage Humidity 10 - 95%, (non-condensing) Shock 10G Vibration 2G, 10 - 55 Hz, 0.75 mm amplitude (non-operating)

#### **MODEL SPECIFICATIONS**

Model Number	Output Voltage	Output Current	Efficiency
HY05020GN	5.0 ± 10%	0-20A	81%
HY128R4GN	12.0 ± 10%	0-8.4A	83%
HY244R2GN	24.0 ± 10%	0-4.2A	85%

#### **MECHANICAL SPECIFICATIONS**

 Size (W x D x H)
 7.1 x 3.6 x 1.2 inches (180 x 93 x 31 mm)

 Weight
 1.5 lb (0.7 kg)



Dimensions in inches; () Dimensions in mm.

CN1-1	AC Neutral
CN1-2	AC Line
CN1-3	Frame Ground
CN1-4	-RS
CN1-5	-V
CN2-6	+V
CN2-7	+RS

### **CONNECTOR DESIGNATIONS**