

MANGO60S Series



FEATURES

- Medical 60601-1 Safety Approvals
- Small 4.17 x 2.24 x 1.14" Footprint
- Class I or Class II Construction
- IPX1 Rated Enclosure
- High Efficiency - Level VI
- High Power Density - 5.63W/in³
- CEC 2008 / ErP2 / EISA 2007 Compliant
- EN55011 / FCC Part 15J Class B Emissions
- 3 Year Warranty



INPUT SPECIFICATIONS

Input Voltage	90~264 VAC (Universal) 300 VAC (maximum Non-Operating)
Input Frequency	47~63Hz
Input Current	1.5A _{RMS} at 115VAC
Inrush Current	<80A @ 240 VAC, Cold Start
Power Factor	EN61000-3-2, Class A
Leakage Current	<100 μA @ 264VAC
No Load Input Power	≤0.1W No Load Input Power @ 240VAC

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Line Regulation	±0.5%
Load Regulation	±5%
Minimum Load	None
Transient Response	±5%, 50% step-load, slew rate 1A/μS
Ripple / Noise	1% pk-pk max
Turn-On Delay	3 seconds max @ 115VAC
Hold-Up Time	>10ms at 115VAC Input
Over-Voltage	110~140% Latching
Over-Load	Hiccup Mode, Auto-Recovery
Short Circuit	Continuous
Over-Temperature	Latching, recycle input and cool to reset

GENERAL SPECIFICATIONS

Efficiency	89% typical at 115/230 VAC, full load
Isolation	4000 VAC – Input to Output 1500 VAC – Input to Ground 500 VDC – Output to Ground
MTBF	200K Hours, Mil-217F at 25 °C, full load
Weight	300g

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 ~ +40°C
Derating	5%/°C > 40°C, up to 50°C max
Storage Temperature	-20 ~ +80°C
Operating Humidity	5~95% (non-condensing)
Operating Altitude	4000M (max)
Shock	294m/s ² (30G), 11mS on 3 axes
Vibration	10-500Hz, 19.6 m/s ² (2G), 20mins 3 axes

EMC & SAFETY

Emissions	EN55011, FCC Part J15, Class B, Conducted EN55011, FCC Part J15, Class B, Radiated
Harmonic Current	EN61000-3-2 Class A
Voltage Flicker	EN61000-3-3
ESD	EN61000-4-2, 8kV contact, 15kV Air Discharge
EFT/Burst	EN61000-4-4, Level 3, Criterion A
Surge	EN61000-4-5 Installation Class 3, Criterion A
Conducted Immunity	EN61000-4-6, 3V _{RMS} (6V _{RMS} , ISM band), Criterion A
Radiated Immunity	EN61000-4-3, 10V/m, Criterion A
Proximity Fields Immunity	EN61000-4-3, (Table 9in IEC60601-1-2 4 th ED)
Magnetic Field	EN61000-4-8, 30A/m, Criterion A
Dips & Interruptions	EN61000-4-11, 0% 0.5cycles, 1 cycles; 70% 25/30 cycles; 0% 250/300cycles; Criterion A/B/C
Safety Approvals	IEC60601-1, 3rd Edition ANSI / AAMI ES60601-1 CSA 22.2 No. 60601-1 EN60601-1, 3rd Edition CE Mark (LVD)

MODELS	OUTPUT VOLTAGE	OUTPUT CURRENT	PEAK CURRENT	RIPPLE & NOISE (MAX)	MAX TOTAL REGULATION
MANGO60S-12xy	12V	5.0A	6.0A	120mV	±5%
MANGO60S-19xy	19V	3.15A	3.8A	190mV	±5%
MANGO60S-24xy	24V	2.5A	3.0A	240mV	±5%
MANGO60S-28xy	28V	2.14A	2.6A	280mV	±5%
MANGO60S-48xy	48V	1.25A	1.5A	480mV	±5%

* Designate Input Type and Safety Class by replacing "x" with the following:
 "A" for IEC320-C14 Inlet (Class I Safety Approvals) "B" for IEC-320 C8 Inlet (Class II Safety Approvals)

* Designate DC Output Connector by replacing "y" with the following:
 "K" for Kycon KPPX-4P Non Locking Connector "B" for Barrel Jack Connector (5.5 x 2.5 x 11mm)

* Other Connectors available upon request, please consult factory. Consult factory for unique Voltage setpoints or other modifications.

OUTLINE DRAWING

