



4"W x 7"L x 2"H

- 100-264VAC Auto Ranging Input
- Compact Footprint
- High Efficiency
- Regulated Outputs
- 5656VDC Isolation
- Built in EMI Filter



<u>Model Number</u>	<u>Output Voltage</u>	<u>Output Amps (max)</u>	<u>Ripple/Noise pp,typ</u>
MMK320S-5	5 VDC	50	150mV
MMK320S-12	12 VDC	25	100mV
MMK320S-15	15 VDC	20	100mV
MMK320S-24	24 VDC	12.5	100mV

Medical Grade 300 Watt Enclosed Switching Power Supplies

MMK320S series

INPUT SPECIFICATIONS

Input Voltage Range	
Nominal:	110-120 / 200-240 VAC
Maximum:	100-132 / 176-264 VAC
	Auto Voltage Select
Frequency Range	47-63 Hz
Inrush Current, typ:	20A/100VAC, 40A/200VAC *
Leakage Current	<500UA @ 264VAC, 50Hz

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Load Regulation	(20% to 100% Load) ± 0.5%, nom (±1% for 5Vout)
Line Regulation	± 0.5%, nom (±1% for 5Vout)
Voltage Tolerance	± 1%
DC Voltage Adjust (typ)	± 6%, typ
Temperature Coefficient	± 0.03%/°C
Ripple/Noise	See Selection Chart
Over Voltage Protection	130% max. auto recovery *
Over Current Protection	160% max. auto recovery *
Short Circuit Protection	auto recovery *
Hold Up Time	20mS, typ. Nom I/P, FL
Turn On Time	≤ 1.0 sec, typ
Rise Time	≤ 20 msec, typ
Over/Under Shoot	< 10% of FS

GENERAL SPECIFICATIONS

Isolation	I/P-O/P: 5656VDC I/P-Ground: 2121VDC O/P-Ground: 707VDC
Efficiency	85%, typ (78% 5Vout)
Switching Frequency	110Khz, (fixed, typical)
Safety UL/cUL:	ANSI/AAMI ES60601-1 3rd ed. CSA C22.2 No. 60601-1 3rd ed.
UL-EU:	EN60601-1 3rd ed.
CB:	IEC60601-1 3rd ed.
CE:	EN60601-1-2
MTBF	100,000 Hours

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10 to +60°C (See Derate)
Storage Temperature	-25 to +70°C *
Relative Humidity	10% to 90%, non-cond *
EMI (Designed to Meet)	EN55011, Class B

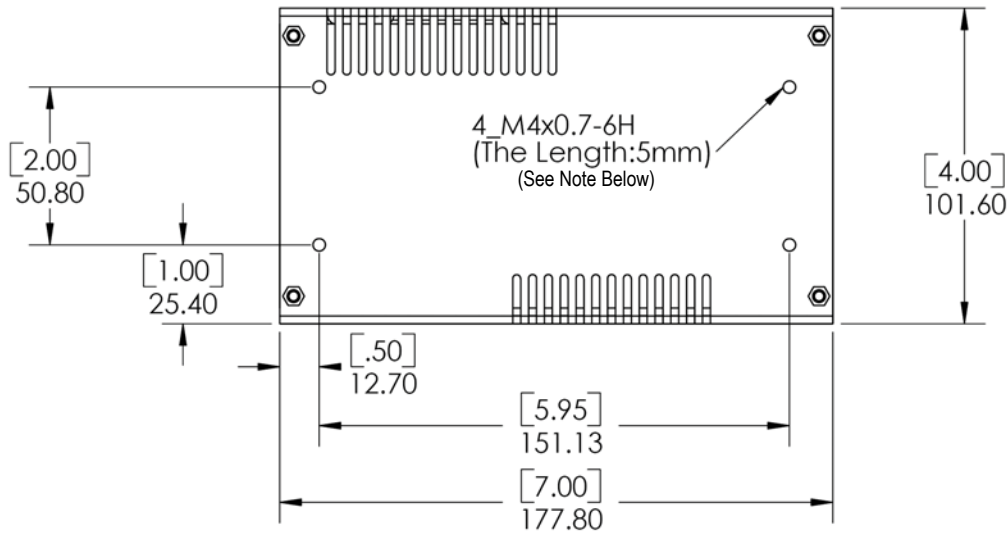
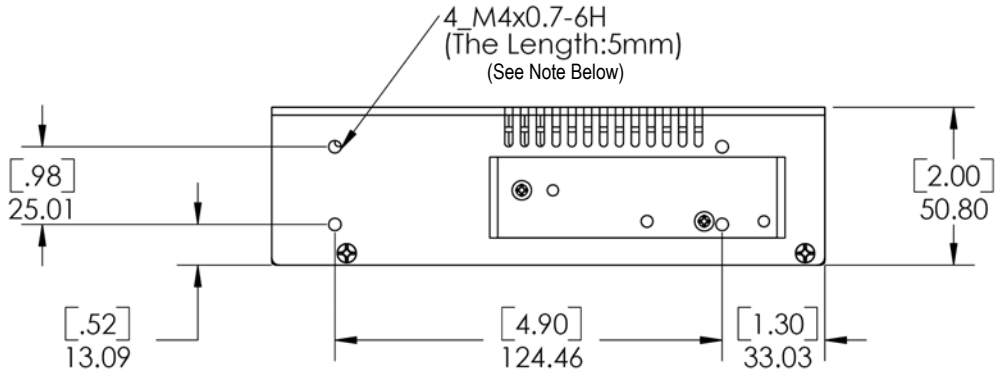
PHYSICAL SPECIFICATIONS

Size	4" x 7" x 2"
Construction	Enclosed
Weight	1.95 lb, (880g)

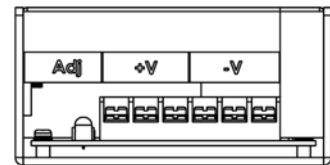
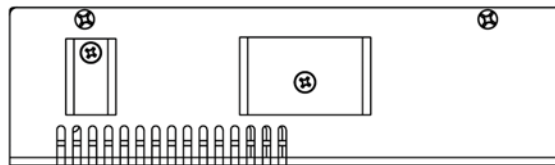
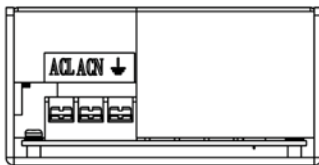
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

MECHANICAL DIMENSIONS



Unit : mm

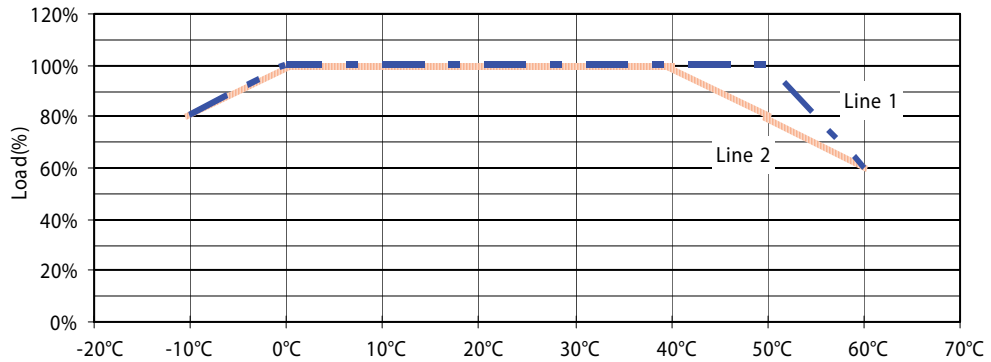


Note: For our M4 x 0.7 aluminum threaded holes:
Recommended torque: 4.5 in-lbs, 5 in-lbs maximum (5 kgf-cm/5.5 kgf-cm max)

PLEASE NOTE:

To improve specifications and safety isolation, connection designations may have changed from prior revisions. Please verify connections per product labels on input and output connections prior to applying power to the unit

OUTPUT DERATING CURVE



- 1. Line 1 : 15V、 24V
- 2. Line 2 : 5V、 12V