

**FEATURES**

- Convection-Cooled 65 Watts in 2" x 3" Footprint
- Medical & ITE Dual Approvals
- 2x MOPP Suited for BF (Body Floating) Applications
- Factory Preset 5V or 12.0V to 56.9V in 0.1V Increments Output
- Up to 0.95 Power Factor
- No Load Power Consumption < 0.2W

**ELECTRICAL SPECIFICATIONS**

Input Voltage	90-264 VAC
Input Frequency	47-63 Hz
Input Current	1A (rms) max. @ 115 VAC, 0.6A (rms) max. @ 230 VAC
Inrush Current	<65A max. @ 115 VAC, <130A max. @ 230 VAC at cold start +25°C
Earth Leakage Current	160µA max. @ 264 VAC
Power Factor	>0.95 @ 115 VAC, >0.9 @ 230 VAC
Output Power Ratings	See table
No Load Power Cons	<0.1W on +5V output model; <0.2W on other output models

STANDARDS & COMPLIANCES

EMC Standards	EN 60601-1-2, EN 55011/FCC Part 18 Class B, EN 55022/CISPR22/ FCC Part 15 Class B
Safety Standards	IEC/EN/UL 60601-1 3rd Ed., ANSI/AAMI ES 60601-1:2005, CSA C22.2 No. 60601-1:08, IEC/EN/UL 60950-1 2nd Ed., CSA-C22.2 No. 60950-1 2nd Ed.
Agency Approvals	UL, CUS, TUV, CE, CB, FCC
Other Compliance	RoHS

GENERAL SPECIFICATIONS

Efficiency	>87% (except >85% for 5V) at full load, 115 VAC
Switching Frequency	65KHz
Hold-up Time	>10 ms typical @ 115 VAC
Operating Temperature*	-20°C to +70°
Derating	Derate linearly 2.5%/°C from +41°C to +70°C
Storage Temperature	-20°C to +85°C
Operating Humidity	0% to 90% non-condensing
Short-Circuit Protection	Shutdown; Auto-recovery
Overload Protection	Set at 110% to 160% (except 110% to 170% for 48V and up) of the max. rating; Auto-recovery
Overvoltage Protection	Shutdown and latch off; AC recycle to restart
Withstand Voltage	5,656 Vdc from input to output, 2,121 Vdc from input to ground
MTBF	155K hours at full load and 25°C ambient temperature calculated per MIL-HDBK-217F

*The output regulation will go up to ±10% at -20°C to -0°C ambient temperature.

MODELS LIST

Product No. ¹	Output Voltage	Output Current	Regulation	Max. Output Power	Ripple & Noise ²
TWM40-05	5V	0-8A	±3%	40W	100mV
TWM65-12	12V	0-5.416A	±3%	65W	100mV
TWM65-15	15V	0-4.333A	±3%	65W	100mV
TWM65-19	19V	0-3.421A	±3%	65W	100mV
TWM65-24	24V	0-2.708A	±3%	65W	120mV
TWM65-28	28V	0-2.321A	±3%	65W	150mV
TWM65-30	30V	0-2.167A	±3%	65W	150mV
TWM65-36	36V	0-1.806A	±3%	65W	160mV
TWM65-48	48V	0-1.355A	±3%	65W	160mV
TWM65-56	56V	0-1.161A	±3%	65W	200mV

Notes:

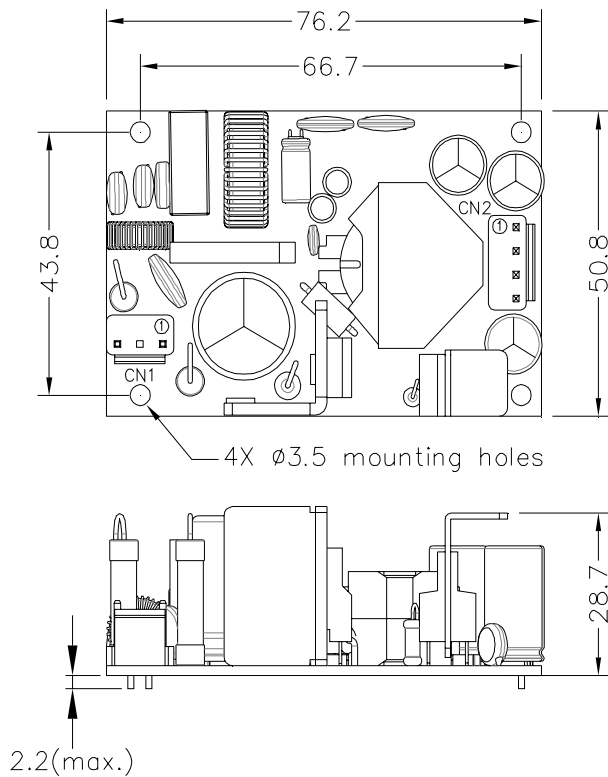
1. Use TWM65-xx.x to order a special output voltage of xx.xV between 12.1V and 56.9V.

2. R&N are peak-to-peak values measured at 20 MHz bandwidth with an 100µF electrolytic capacitor and a 0.1µF ceramic capacitor in parallel.

TWM65 Series

65W Medical & ITE Grade AC/DC Power Supplies

MECHANICAL SPECIFICATIONS



Notes:

1. Dimensions in mm
2. Tolerance: ± 0.5 mm
3. Weight: 120 grams approx.

CN1: Input Connector

JST B3P-VH-B (7.92mm pitch) or equivalent;
Mating connector: JST VHR-3N or equivalent

Pin #	Function
1	AC Line
2	AC Neutral

CN2: Output Connector

JST B4P-VH-B (3.96mm pitch) or equivalent;
Mating connector: JST VHR-4N or equivalent

Pin #	Function
1, 2	RTN
3, 4	+Vo