















IEC62368-1











- · 4"×2" compact size
- · Medical safety approved (2 x MOPP) according to ANSI/AAMI ES60601-1 and IEC/BS EN/EN60601-1
- Suitable for BF application with appropriate system consideration
- Cooling by free air convection
- EMI class B for class I configuration
- Extremely low leakage current
- Protections: Short circuit / Overload / Over voltage
- 3 years warranty

# Applications

- · Oral irrigator
- · Hemodialysis machine
- Medical computer monitors
- · Sleep apnea devices

#### **■** GTIN CODE

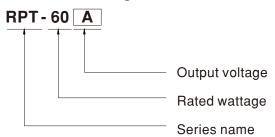
MW Search: https://www.meanwell.com/serviceGTIN.aspx

## Description

RPT-60 is a 60W highly reliable green PCB type medical power supply with a high power density on the 4" by 2" footprint. It accepts 90~264VAC input and offers dual output voltages.

RPT-60 is able to be used for Class I (with FG) system design. The extremely low leakage current is less than 150 #A. In addition, it conforms to international medical regulations (2\*MOPP) and EMC BS EN/EN55011.

# ■ Model Encoding





| MODEL                      |   | RPT-60A  |   |   | RPT-60B  |   |   | RPT-60C  |  |   |  |  |
|----------------------------|---|--|---|---|--|---|---|--|--|---|--|--|
|                            | OUTPUT NUMBER   | CH1  | CH2   | CH3   | CH1  | CH2   | CH3   | CH1  | CH2  | CH3   |  |  |
| ОИТРИТ                     | DC VOLTAGE  | 5V   | 12V   | -5V   | 5V   | 12V   | -12V  | 5V   | 15V  | -15V  |  |  |
|                            | RATED CURRENT   | 4A   | 2A  | 0.5A  | 4A   | 2A  | 0.5A  | 4A   | 1.5A   | 0.5A  |  |  |
|                            | CURRENT RANGE   | 0.5 ~ 4.4A   | 0.1 ~ 2.2A  | 0.1 ~ 0.55A   | 0.5 ~ 4.4A   | 0.1 ~ 2.2A  | 0.1 ~ 0.55A                                     | 0.5 ~ 4.4A   | 0.1 ~ 1.65A  | 0.1 ~ 0.55A                                       |  |  |
|                            | RATED POWER   | 46.5W  |   |   | 50W  |   |   | 50W  | -  |   |  |  |
|                            | PEAK LOAD(10sec.) Note.2  | 51.15W   |   |   | 55W  |   |   | 55W  |  |   |  |  |
|                            | RIPPLE & NOISE (max.) Note.3  |  | 80mVp-p   | 80mVp-p   | 80mVp-p  | 80mVp-p   | 100mVp-p  | 80mVp-p  | 100mVp-p   | 150mVp-p  |  |  |
|                            | VOLTAGE TOLERANCE Note.4  |  | ±6.0%   | +9,-8%  | +3,-2%   | ±6.0%   | +10,-6%   | +3,-2%   | ±6.0%  | ±8.0%   |  |  |
|                            | LINE REGULATION   | ±0.5%  | ±1.0%   | ±1.0%   | ±0.5%  | ±1.0%   | ±2.0%   | ±0.5%  | ±2.0%  | ±2.0%   |  |  |
|                            | LOAD REGULATION   | ±1.5%  | ±2.0%   | +5,-7%  | ±1.5%  | ±2.0%   | ±5.0%   | ±1.5%  | ±3.0%  | ±4.0%   |  |  |
|                            | SETUP, RISE TIME  |  | 1   |   |  |   | _ 0.070   | 1 = 1.070  |  | = 1.070   |  |  |
|                            | HOLD UP TIME (Typ.)   | 300ms, 15ms/230VAC 300ms, 15ms/115VAC at full load 70ms/230VAC 15ms/115VAC at full load  |   |   |  |   |   |  |  |   |  |  |
|                            | VOLTAGE RANGE   | 90 ~ 264VAC  |   |   |  |   |   |  |  |   |  |  |
|                            |   |  | 121 ~ 310   | JVDC  |  |   |   |  |  |   |  |  |
|                            | FREQUENCY RANGE   | 47 ~ 63Hz  |   |   | 700/   |   |   |  |  |   |  |  |
| NPUT                       | EFFICIENCY (Typ.)   | 77%  | 0.74/0  | 201/40  | 78%  |   |   | 79%  |  |   |  |  |
|                            | AC CURRENT (Typ.)   | 1.1A/115VAC 0.7A/230VAC  |   |   |  |   |   |  |  |   |  |  |
|                            | INRUSH CURRENT (Typ.)   |  | T 60A/230VA   |   | -  |   |   |  |  |   |  |  |
|                            | LEAKAGE CURRENT Note.5  | Earth leakage  | e current < 150   | μA/264VAC ,   | Touch current  | < 100 μA/264  | VAC   |  |  |   |  |  |
|                            | OVERLOAR  | 115 ~ 150% r   | ated output po  | wer   |  |   |   |  |  |   |  |  |
| DOTECTION                  | OVERLOAD  | Protection typ   | pe : Hiccup mo  | de, recovers a  | utomatically a   | fter fault condi  | tion is removed                                 |  |  |   |  |  |
| PROTECTION                 | OVER VOLTAGE  | CH1: 5.75 ~ 6  | 6.75V   |   |  |   |   |  |  |   |  |  |
|                            | OVER VOLIAGE  | Protection typ   | pe : Shut down  | o/p voltage, re   | power on to  | recover   |   |  |  |   |  |  |
|                            | WORKING TEMP.   | -20 ~ +65°C (  | (Refer to "Dera   | ating Curve")   |  |   |   |  |  |   |  |  |
|                            | WORKING HUMIDITY  | 20 ~ 90% RH  | non-condensi  | ng  |  |   |   |  |  |   |  |  |
| ENVIRONMENT                | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C,   | 10 ~ 95% RH   | non-condensin   | g  |   |   |  |  |   |  |  |
|                            | TEMP. COEFFICIENT   | ±0.03%/°C (0~45°C)   |   |   |  |   |   |  |  |   |  |  |
|                            | VIBRATION   | 10 ~ 500Hz, 2  | 2G 10min./1cy   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                         |  |   |   |  |  |   |  |  |
|                            |   |  |   |   |  |   |   |  |  |   |  |  |
|                            | OPERATING ALTITUDE Note.6   | 3000 meters  | •   | , р   |  | 11011g X, 1, 2 ax   | (5)   |  |  |   |  |  |
|                            | OPERATING ALTITUDE Note.6 SAFETY STANDARDS  | UL62368-1,T  |   | 62368-1,IEC62   | 2368-1,IEC60   | 601-1, EAC TP   | TC 004,UL ANS                                   |  | 601-1,   |   |  |  |
|                            |   | UL62368-1,T<br>CAN/CSA-C2  | 22.2 No. 60601  | 62368-1,IEC62   | 2368-1,IEC600<br>3 approved,   | 601-1, EAC TP<br>TUV BS EN/EN   | TC 004,UL ANS<br>N60601-1 approv                |  | 601-1,   |   |  |  |
|                            | SAFETY STANDARDS  | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Seco  | 22.2 No. 60601<br>ondary: 2xMOF   | 62368-1,IEC62<br>-1:14 - Edition  | 2368-1,IEC600<br>3 approved, rth:1xMOPP,   | 601-1, EAC TP<br>TUV BS EN/EN   | TC 004,UL ANS<br>N60601-1 approv                |  | 601-1,   |   |  |  |
|                            | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE  | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Seco<br>I/P-O/P:4KV   | 22.2 No. 60601<br>ondary: 2xMOF<br>AC I/P-FG:21   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F                                | 2368-1,IEC600<br>3 approved, rth:1xMOPP, G:1.5KVAC   | 601-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear  | TC 004,UL ANS<br>N60601-1 approv                |  | 601-1,   |   |  |  |
|                            | SAFETY STANDARDS ISOLATION LEVEL  | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Seco<br>I/P-O/P:4KV   | 22.2 No. 60601<br>ondary: 2xMOF<br>AC I/P-FG:21   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea  | 2368-1,IEC600<br>3 approved, rth:1xMOPP, G:1.5KVAC   | 601-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear  | TC 004,UL ANS<br>N60601-1 approv                |  | ,  |   |  |  |
|                            | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE  | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Seco<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter   | 22.2 No. 60601<br>ondary: 2xMOF<br>AC I/P-FG:20<br>FG, O/P-FG:10  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F                                | 2368-1,IEC600<br>3 approved,<br>rth:1xMOPP, S<br>G:1.5KVAC<br>DVDC / 25°C/7  | 601-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH  | PTC 004,UL ANS<br>N60601-1 approv<br>rth:1xMOPP | red Test Level   | ,  |   |  |  |
|                            | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted 6  | 22.2 No. 60601 condary: 2xMOF AC I/P-FG:2l FG, O/P-FG:10 emission   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F                                | 2368-1,IEC600<br>3 approved,<br>rth:1xMOPP, s<br>G:1.5KVAC<br>IVDC / 25°C/ i<br>Standard<br>BS EN/ENS  | 601-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH  | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B   | ,  |   |  |  |
| SAFETY &                   | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE  | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em   | 22.2 No. 60601 condary: 2xMOF AC I/P-FG:2l FG, O/P-FG:10 emission   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F                                | 2368-1,IEC60(3 approved, rth:1xMOPP, \$ G:1.5KVAC  VDC / 25°C/7  Standard  BS EN/EN\$ BS EN/EN\$   | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR  | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B   | ,  |   |  |  |
|                            | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co  | 22.2 No. 60601 condary: 2xMOF AC I/P-FG:21 FG, O/P-FG:10 emission urrent  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F                                | 2368-1,IEC60(3 approved, rth:1xMOPP, \$ G:1.5KVAC  VDC / 25°C/7  Standard  BS EN/EN\$ BS EN/EN\$   | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2   | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A   | ,  |   |  |  |
| SAFETY &<br>EMC<br>Note 8) | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co  | 22.2 No. 60601 pndary: 2xMOF AC I/P-FG:2l FG, O/P-FG:10 emission urrent er  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC60(3 approved, rth:1xMOPP, \$ G:1.5KVAC  VDC / 25°C/7  Standard  BS EN/EN\$ BS EN/EN\$   | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2   | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B   | ,  |   |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co<br>Voltage flick<br>BS EN/EN556  | 22.2 No. 60601 condary: 2xMOF AC I/P-FG:21 FG, O/P-FG:10 emission urrent  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC60<br>3 approved,<br>rth:1xMOPP, s<br>G:1.5kVAC<br>IVDC / 25°C / 3<br>Standard<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS   | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2   | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A   | / Note   |   |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co<br>Voltage flick<br>BS EN/EN556  | 22.2 No. 60601 pndary: 2xMOF AC I/P-FG:2l FG, O/P-FG:10 emission urrent er  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC60<br>3 approved,<br>rth:1xMOPP, s<br>G:1.5KVAC<br>IVDC / 25°C / 3<br>Standard<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS  | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>51000-3-2   | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A   | / Note   | 1 9VV contra                                      |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co<br>Voltage flick<br>BS EN/EN556  | 22.2 No. 60601 pndary: 2xMOF AC I/P-FG:2l FG, O/P-FG:10 emission urrent er  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC60<br>3 approved,<br>rth:1xMOPP, s<br>G:1.5kVAC<br>IVDC / 25°C / 3<br>Standard<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS   | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>51000-3-2   | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15  | / Note / Note KV air ; Level 4   | •   |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co<br>Voltage flick<br>BS EN/EN556  | 22.2 No. 60601 pndary: 2xMOF AC //P-FG:21 GG, O/P-FG:10 emission urrent er 035, BS EN/E   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC60<br>3 approved,<br>rth:1xMOPP, s<br>G:1.5KVAC<br>IVDC / 25°C / 3<br>Standard<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS<br>BS EN/ENS  | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-3-3  | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10\   | / Note   | 7GHz)   |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Secc<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co<br>Voltage flick<br>BS EN/EN55<br>Parameter<br>ESD   | 22.2 No. 60601 pndary: 2xMOF AC //P-FG:21 GG, O/P-FG:10 emission urrent er 035, BS EN/E   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC60i 3 approved, rth:1xMOPP, s G:1.5KVAC  NDC / 25°C / 3  Standard BS EN/ENS  | 55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-4-2<br>61000-4-3   | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10\   | / Note / Note KV air ; Level 4 //m( 80MHz~2.7  | 7GHz)   |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                             | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Seco<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co<br>Voltage flick<br>BS EN/EN550<br>Parameter<br>ESD  | 22.2 No. 60601 condary: 2xMOF AC //P-FG:21 G, O/P-FG:10 emission urrent er 035, BS EN/E   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC600 3 approved, rth:1xMOPP, 3 G:1.5KVAC VDC / 25°C/ 3 Standard BS EN/EN8   | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-3-3<br>61000-4-2<br>61000-4-3<br>61000-4-4                           | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10\ Table 9, 9-2 Level 3, 2K  | / Note / Note KV air ; Level 4 //m( 80MHz~2.7  | 7GHz )<br>~5.78GHz )                              |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | UL62368-1,T<br>CAN/CSA-C2<br>Primary-Seco<br>I/P-O/P:4KVA<br>I/P-O/P, I/P-F<br>Parameter<br>Conducted &<br>Radiated em<br>Harmonic co<br>Voltage flick<br>BS EN/EN55<br>Parameter<br>ESD<br>RF field sus<br>EFT bursts<br>Surge susce                      | 22.2 No. 60601 condary: 2xMOF AC //P-FG:21 G, O/P-FG:10 emission urrent er 035, BS EN/E   | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC600 3 approved, rth:1xMOPP, s G:1.5KVAC VDC / 25°C/7 Standard BS EN/ENS BS EN/ENS BS EN/ENS BS EN/ENS Standard BS EN/ENS   | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>61000-3-2<br>61000-3-3<br>61000-4-2<br>61000-4-3<br>61000-4-4<br>61000-4-5                              | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10\ Table 9, 9-2 Level 3, 2K  | / Note  / Note  KV air; Level 4 //m( 80MHz~2.7 28V/m( 385MHz.2)  KV/Line-FG; 21                                | 7GHz )<br>~5.78GHz )                              |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | UL62368-1,T CAN/CSA-C2 Primary-Secc I/P-O/P:4KVA I/P-O/P, I/P-F Parameter Conducted e Radiated em Harmonic co Voltage flick BS EN/EN55 Parameter ESD RF field sus EFT bursts Surge susce Conducted e   | 22.2 No. 60601 pndary: 2xMOF AC //P-FG:21 G, O/P-FG:10 emission mission urrent er 035, BS EN/E  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC600 3 approved, rth:1xMOPP, 3 G:1.5KVAC VDC / 25°C/7 Standard BS EN/EN8  | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-3-3<br>61000-4-2<br>61000-4-3<br>61000-4-4<br>61000-4-5<br>61000-4-6 | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10\ Table 9, 9-2 Level 3, 2K Level 4, 44                                      | / Note  / Note  KV air; Level 4 //m( 80MHz~2.7 28V/m( 385MHz.2 V  KV/Line-FG; 21                               | 7GHz )<br>~5.78GHz )                              |  |  |
| MC                         | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | UL62368-1,T CAN/CSA-C2 Primary-Seco I/P-O/P:4KVA I/P-O/P, I/P-F Parameter Conducted e Radiated em Harmonic ci Voltage flick BS EN/EN556 Parameter ESD RF field sus EFT bursts Surge susce Conducted e Magnetic field                                       | 22.2 No. 60601 pndary: 2xMOF AC //P-FG:21 G, O/P-FG:10 emission urrent er 035, BS EN/E cceptibility susceptibility  | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC600 3 approved, rth:1xMOPP, s G:1.5KVAC  VDC / 25°C / 3  Standard BS EN/ENG  | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-3-3<br>61000-4-2<br>61000-4-3<br>61000-4-4<br>61000-4-5<br>61000-4-6 | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10\ Table 9, 9-2 Level 3, 2K Level 4, 4h Level 3, 10 Level 4, 30 100% dip 1 p | / Note  / Note  KV air; Level 4 //m( 80MHz~2.7 28V/m( 385MHz.2 V  KV/Line-FG; 21                               | 7GHz)<br>~5.78GHz)<br>KV/Line-Lin<br>5 periods,   |  |  |
| MC                         | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | UL62368-1,T CAN/CSA-C2 Primary-Seco I/P-O/P:4KVA I/P-O/P, I/P-F Parameter Conducted e Radiated em Harmonic ci Voltage flick BS EN/EN556 Parameter ESD RF field sus EFT bursts Surge susce Conducted e Magnetic field                                       | 22.2 No. 60601 pndary: 2xMOF AC I/P-FG:21 G, O/P-FG:10 emission urrent er 035, BS EN/E acceptibility susceptibility eld immunity , interruption                             | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500               | 2368-1,IEC600 3 approved, rth:1xMOPP, s G:1.5KVAC  NVDC / 25°C / 3  Standard BS EN/ENG | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-3-3<br>61000-4-2<br>61000-4-3<br>61000-4-6<br>61000-4-8<br>61000-4-8 | TC 004,UL ANS<br>160601-1 approv<br>tth:1xMOPP  | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10 Table 9, 9-2 Level 4, 4H Level 3, 10 Level 4, 30 100% dip 1 p 100% interru | / Note  / Note  KV air; Level 4  //m( 80MHz~2.7  28V/m( 385MHz-2.7  KV/Line-FG; 21  V  A/m  eriods, 30% dip 25 | 7GHz)<br>~5.78GHz)<br>KV/Line-Lin<br>5 periods,   |  |  |
| EMC                        | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE  EMC EMISSION  EMC IMMUNITY | UL62368-1,T CAN/CSA-C2 Primary-Secc I/P-O/P:4KVA I/P-O/P, I/P-F Parameter Conducted & Radiated em Harmonic cu Voltage flick BS EN/EN550 Parameter ESD RF field sus EFT bursts Surge susce Conducted & Magnetic field Voltage dip, 4415.3K hrs in           | 22.2 No. 60601 pndary: 2xMOF AC I/P-FG:21 G, O/P-FG:10 emission urrent er 035, BS EN/E acceptibility susceptibility eld immunity , interruption                             | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC                                      | 2368-1,IEC600 3 approved, rth:1xMOPP, s G:1.5KVAC  NVDC / 25°C / 3  Standard BS EN/ENG | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-3-3<br>61000-4-2<br>61000-4-3<br>61000-4-6<br>61000-4-8<br>61000-4-8 | TC 004,UL ANS<br>N60601-1 approv<br>th:1xMOPP   | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10 Table 9, 9-2 Level 4, 4H Level 3, 10 Level 4, 30 100% dip 1 p 100% interru | / Note  / Note  KV air; Level 4  //m( 80MHz~2.7  28V/m( 385MHz-2.7  KV/Line-FG; 21  V  A/m  eriods, 30% dip 25 | 7GHz )<br>~5.78GHz )<br>KV/Line-Lin<br>5 periods, |  |  |
| EMC<br>Note 8)             | SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE  EMC EMISSION  EMC IMMUNITY | UL62368-1,T CAN/CSA-C2 Primary-Secc I/P-O/P:4KVA I/P-O/P, I/P-F Parameter Conducted & Radiated em Harmonic cu Voltage flick BS EN/EN550 Parameter ESD RF field sus EFT bursts Surge susce Conducted & Magnetic fie Voltage dip, 4415.3K hrs i 101.6*50.8*2 | 22.2 No. 60601 condary: 2xMOF AC I/P-FG:21 G, O/P-FG:10 emission urrent er 035, BS EN/E acceptibility susceptibility susceptibility di immunity , interruption min. Telcore | 62368-1,IEC62<br>-1:14 - Edition<br>PP, Primary-Ea<br>KVAC O/P-F<br>0M Ohms / 500<br>N60601-1-2 | 2368-1,IEC600 3 approved, rth:1xMOPP, s G:1.5KVAC  NVDC / 25°C / 3  Standard BS EN/ENG | 501-1, EAC TP<br>TUV BS EN/EN<br>Secondary-Ear<br>70% RH<br>55011 (CISPR<br>55011 (CISPR<br>61000-3-2<br>61000-3-3<br>61000-4-2<br>61000-4-3<br>61000-4-6<br>61000-4-8<br>61000-4-8 | TC 004,UL ANS<br>N60601-1 approv<br>th:1xMOPP   | Test Level Class B Class B Class A Test Level Level 4, 15 Level 3, 10 Table 9, 9-2 Level 4, 4H Level 3, 10 Level 4, 30 100% dip 1 p 100% interru | / Note  / Note  KV air; Level 4  //m( 80MHz~2.7  28V/m( 385MHz-2.7  KV/Line-FG; 21  V  A/m  eriods, 30% dip 25 | 7GHz )<br>~5.78GHz )<br>KV/Line-Lin<br>5 periods, |  |  |

- 4. Tolerance : includes set up tolerance, line regulation and load regulation.
- 5. Touch current was measured from primary input to DC output.
  6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
  7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.

  - 8. Heat Sink HS1, HS2 can not be shorted.

NOTE

- 9. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm\*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



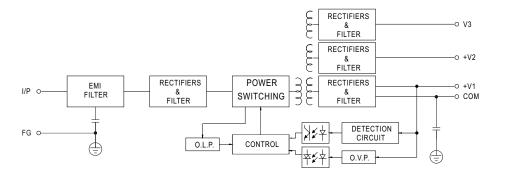
| MODEL                |   | RPT-60D   |  |  | RPT-6003  | RPT-6003   |   |  |  |  |
|----------------------|---|---|--|--|---|--|---|--|--|--|
|                      | OUTPUT NUMBER   | CH1   | CH2  | CH3  | CH1   | CH2  | CH3   |  |  |  |
| ОИТРИТ               | DC VOLTAGE  | 5V  | 24V  | 12V  | 3.3V  | 5V   | 12V   |  |  |  |
|                      | RATED CURRENT   | 3.5A  | 1A   | 0.5A   | 5A  | 3A   | 0.7A  |  |  |  |
|                      | CURRENT RANGE   | 0.5 ~ 3.85A   | 0.1 ~ 1.1A   | 0.1 ~ 0.55A  | 0.5 ~ 5.5A  | 0.3 ~ 3.3A   | 0.1 ~ 0.77A   |  |  |  |
|                      | RATED POWER   | 47.5W   |  |  | 39.9W   | <u>'</u>   | -   |  |  |  |
|                      | PEAK LOAD(10sec.) Note.2  | 52.25W  |  |  | 43.89W  |  |   |  |  |  |
|                      | RIPPLE & NOISE (max.) Note.3  | 80mVp-p   | 150mVp-p   | 80mVp-p  | 80mVp-p   | 80mVp-p  | 80mVp-p   |  |  |  |
|                      | VOLTAGE TOLERANCE Note.4  | +3,-2%  | ±6.0%  | ±8.0%  | +3,-2%  | ±8.0%  | +10,-6%   |  |  |  |
|                      | LINE REGULATION   | ±0.5%   | ±2.0%  | ±2.0%  | ±0.5%   | ±1.0%  | ±2.0%   |  |  |  |
|                      | LOAD REGULATION   | ±1.5%   | ±3.0%  | ±4.0%  | ±1.5%   | ±2.0%  | +5.5,-5%  |  |  |  |
|                      | SETUP, RISE TIME  | 300ms, 15ms/230VA   |  | ,  |   |  |   |  |  |  |
|                      | HOLD UP TIME (Typ.)   | 300ms, 15ms/230VAC 300ms, 15ms/115VAC at full load 70ms/230VAC 15ms/115VAC at full load   |  |  |   |  |   |  |  |  |
|                      | VOLTAGE RANGE   | 90 ~ 264VAC 127 ~ 370VDC  |  |  |   |  |   |  |  |  |
|                      | FREQUENCY RANGE   | 90 ~ 264 VAC 127 ~ 370 VDC 47 ~ 63Hz  |  |  |   |  |   |  |  |  |
|                      | EFFICIENCY (Typ.)   | 79%   |  |  | 75%   |  |   |  |  |  |
| NPUT                 | AC CURRENT (Typ.)   | 1.1A/115VAC   |  |  |   |  |   |  |  |  |
|                      | INRUSH CURRENT (Typ.)   | 1.1A/115VAC 0.7A/230VAC 0.7A/230VAC 0.7A/230VAC 0.7A/230VAC 0.7A/230VAC 0.7A/230VAC 0.7A/230VAC 0.7A/230VAC 0.7A/230VAC   |  |  |   |  |   |  |  |  |
|                      | LEAKAGE CURRENT Note.5  |   |  | C , Touch current < 10   | Ω <b>μ</b> Δ/26/\\ΔC  |  |   |  |  |  |
|                      | ELTROTOL GOTALERT HOLO.   | 115 ~ 150% rated ou   | -  | O, Touch current vite  | 0 μπ/204 νπο  |  |   |  |  |  |
| PROTECTION           | OVERLOAD  |   |  | s automatically after f  | ault condition is remo  | wed  |   |  |  |  |
|                      |   | CH1: 5.75 ~ 6.75V   | oup moue, recever  | 3 automatically after in   | CH1: 3.8 ~ 4.45   |  |   |  |  |  |
|                      | OVER VOLTAGE  |   | ıt down o/n voltage  | , re-power on to recov   |   | ) V  |   |  |  |  |
|                      | WORKING TEMP  | -20 ~ +65°C (Refer t  |  |  |   |  |   |  |  |  |
|                      | WORKING TEMP.   | 20 ~ 90% RH non-co  |  | )  |   |  |   |  |  |  |
|                      | WORKING HUMIDITY  | _   |  | oina   |   |  |   |  |  |  |
| NVIRONMENT           | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95  |  | sing   |   |  |   |  |  |  |
|                      | TEMP. COEFFICIENT   | ±0.03%/°C (0~45°C)  |  |  |   |  |   |  |  |  |
|                      | VIDDATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |  |  |   |  |   |  |  |  |
|                      | VIBRATION OPERATING ALTITUDE Note 6   |   | in./1cycle, period f   | or 60min. each along   | X, Y, Z axes  |  |   |  |  |  |
|                      | OPERATING ALTITUDE Note.6   | 3000 meters<br>UL62368-1,TUV BS   | EN/EN62368-1,IE  | C62368-1,IEC60601-   | I, EAC TP TC 004,UL   | ANSI/AAMI ES60601  | -1,   |  |  |  |
|                      | OPERATING ALTITUDE Note.6 SAFETY STANDARDS  | 3000 meters<br>UL62368-1,TUV BS<br>CAN/CSA-C22.2 No   | EN/EN62368-1,IE0   | C62368-1,IEC60601-1  | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a  | pproved  | -1,   |  |  |  |
|                      | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL  | 3000 meters UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary:  | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-   | C62368-1,IEC60601-<br>ion 3 approved, TUV<br>Earth:1xMOPP, Seco  | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a  | pproved  | -1,   |  |  |  |
|                      | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE  | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F   | EN/EN62368-1,IE0<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F  | C62368-1,IEC60601-<br>ion 3 approved, TUV<br>Earth:1xMOPP, Seco<br>P-FG:1.5KVAC  | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF  | pproved  | -1,   |  |  |  |
|                      | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL  | 3000 meters UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P   | EN/EN62368-1,IE0<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F  | C62368-1,IEC60601-<br>ion 3 approved, TUV<br>Earth:1xMOPP, Seco<br>P-FG:1.5KVAC<br>500VDC / 25°C / 70%   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF  | pproved  |   |  |  |  |
|                      | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE  | 3000 meters UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC  | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601-<br>ion 3 approved, TUV<br>Earth:1xMOPP, Seco<br>P-FG:1.5KVAC<br>500VDC / 25°C / 70%<br>Standard   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF  | pproved Test Level / N   |   |  |  |  |
|                      | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission  | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70% Standard BS EN/EN5501   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>B RH  | Test Level / N Class B   |   |  |  |  |
| SAFETY &             | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE  | 3000 meters UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/R I/P-O/P, I/P-FG, O/P Parameter Conducted emissic Radiated emission   | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)  | Test Level / N Class B Class B   |   |  |  |  |
| SAFETY &             | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/f I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current  | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2   | Test Level / N Class B Class B Class A   |   |  |  |  |
| SAFETY & EMC Note 9) | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/I I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker   | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100  BS EN/EN6100   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2   | Test Level / N Class B Class B   |   |  |  |  |
| EMC                  | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/f I/P-O/P, I/P-FG, O/P Parameter Conducted emission Radiated emission Harmonic current Voltage flicker BS EN/EN55035, BS  | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC  500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN56100  BS EN/EN6100  2  | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2   | Test Level / N Class B Class B Class A   | ote   |  |  |  |
| EMC                  | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter  | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70% Standard BS EN/EN5501 BS EN/EN5501 BS EN/EN6100 BS EN/EN6100 2 Standard   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>Indary-Earth:1xMOPF<br>Is RH<br>I (CISPR11)<br>I (CISPR11)<br>0-3-2<br>0-3-3  | Test Level / N Class B Class B Class A   | ote   |  |  |  |
| EMC                  | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/f I/P-O/P, I/P-FG, O/P Parameter Conducted emission Radiated emission Harmonic current Voltage flicker BS EN/EN55035, BS  | EN/EN62368-1,IE<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC  500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN56100  BS EN/EN6100  2  | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>Indary-Earth:1xMOPF<br>Is RH<br>I (CISPR11)<br>I (CISPR11)<br>0-3-2<br>0-3-3  | Test Level / N Class B Class B Class A Test Level / N Level 4, 15KV  | ote  ote air; Level 4, 8KV conta  |  |  |  |
| EMC                  | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter  | EN/EN62368-1,IEt<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /   | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70% Standard BS EN/EN5501 BS EN/EN5501 BS EN/EN6100 BS EN/EN6100 2 Standard   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2<br>0-3-3  | Test Level / N Class B Class B Class A Test Level / N Level 4, 15KV Level 3, 10V/m(  | ote   |  |  |  |
| EMC                  | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  | EN/EN62368-1,IEt<br>. 60601-1:14 - Edit<br>2xMOPP, Primary-<br>P-FG:2KVAC O/F<br>-FG:100M Ohms /   | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100  BS EN/EN6100  2  Standard  BS EN/EN6100  | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>Indary-Earth:1xMOPF<br>B RH<br>I (CISPR11)<br>I (CISPR11)<br>0-3-2<br>0-3-3<br>0-4-2  | Test Level / N Class B Class B Class A Test Level / N Level 4, 15KV Level 3, 10V/m(  | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz)   |  |  |  |
| EMC                  | OPERATING ALTITUDE Note. 6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE                            | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  RF field susceptib  | EN/EN62368-1,IEc. 60601-1:14 - Edit 2xMOPP, Primary-P-FG:2KVAC O/F-FG:100M Ohms / EDIT OF COMMON | C62368-1,IEC60601- ion 3 approved, TUV -Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100  BS EN/EN6100  2  Standard  BS EN/EN6100  BS EN/EN6100  BS EN/EN6100   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>Indary-Earth:1xMOPF<br>B RH<br>I (CISPR11)<br>I (CISPR11)<br>0-3-2<br>0-3-3<br>0-4-2<br>0-4-3                                     | Test Level / N Class B Class B Class A Test Level / N Level 4, 15KV Level 3, 10V/m Table 9, 9~28V/ Level 3, 2KV  | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz)   |  |  |  |
| EMC                  | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  RF field susceptib EFT bursts   | EN/EN62368-1,IEC. 60601-1:14 - Edit 2xMOPP, Primary-P-FG:2KVAC O/F-FG:100M Ohms / ::  S EN/EN60601-1-ility   | C62368-1,IEC60601- ion 3 approved, TUV -Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100  | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>Indary-Earth:1xMOPF<br>I (CISPR11)<br>1 (CISPR11)<br>0-3-2<br>0-4-2<br>0-4-3<br>0-4-4<br>0-4-5                                    | Test Level / N Class B Class B Class A Test Level / N Level 4, 15KV Level 3, 10V/m Table 9, 9~28V/ Level 3, 2KV  | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz) m(385MHz~5.78GHz)   |  |  |  |
| EMC                  | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/f I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  RF field susceptib EFT bursts Surge susceptibili  | EN/EN62368-1,IEC. 60601-1:14 - Edit 2xMOPP, Primary-P-FG:2KVAC O/F-FG:100M Ohms / ::  S EN/EN60601-1-:  ility  ty  ty  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100   | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>Indary-Earth:1xMOPF<br>I (CISPR11)<br>1 (CISPR11)<br>0-3-2<br>0-3-3<br>0-4-2<br>0-4-3<br>0-4-4<br>0-4-5<br>0-4-6                  | Test Level / N Class B Class B Class A  Test Level / N Level 4, 15KV Level 3, 10V/m Table 9, 9~28V/ Level 3, 2KV Level 4, 4KV/l  | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz) m(385MHz~5.78GHz) Line-FG; 2KV/Line-Lin                           |  |  |  |
| EMC                  | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION                | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  RF field susceptib EFT bursts Surge susceptibili Conducted susceptib  | EN/EN62368-1,IE0. 60601-1:14 - Edit 2xMOPP, Primary-P-FG:2KVAC O/F-FG:100M Ohms / EDIT OF COMMON | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100                             | 1, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>Indary-Earth:1xMOPF<br>B RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2<br>0-3-3<br>0-4-2<br>0-4-3<br>0-4-4<br>0-4-5<br>0-4-6<br>0-4-8 | Test Level / N Class B Class B Class A  Test Level / N Level 4, 15KV Level 3, 10V/m Table 9, 9~28V/ Level 3, 2KV Level 4, 4KV/l Level 3, 10V Level 4, 30A/m Level 4, 30A/m                     | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz) m(385MHz~5.78GHz)  Line-FG; 2KV/Line-Lin ds, 30% dip 25 periods,  |  |  |  |
| EMC                  | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE  EMC EMISSION  EMC IMMUNITY | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  RF field susceptib EFT bursts Surge susceptibili Conducted susceptibili Conducted susceptibili Conducted susceptibili Conducted susceptibili Voltage dip, interri | EN/EN62368-1,IE60601-1:14 - Edit 2xMOPP, Primary- P-FG:2KVAC O/F -FG:100M Ohms / on  S EN/EN60601-1- dility  by otibility  uption  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100  BS EN/EN6100 | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2<br>0-3-3<br>0-4-2<br>0-4-3<br>0-4-4<br>0-4-5<br>0-4-6<br>0-4-8    | Test Level / N Class B Class B Class A  Test Level / N Level 4, 15KV Level 3, 10V/m Table 9, 9~28V/ Level 3, 2KV Level 4, 4KV/l Level 3, 10V Level 4, 30A/m 100% dip 1 perior 100% interruptic | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz) m(385MHz~5.78GHz)  Line-FG; 2KV/Line-Lin ds, 30% dip 25 periods,  |  |  |  |
| EMC<br>Note 9)       | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE  EMC EMISSION  MTBF         | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  RF field susceptib EFT bursts Surge susceptibili Conducted suscep Magnetic field imn Voltage dip, interri   | EN/EN62368-1,IE60601-1:14 - Edit 2xMOPP, Primary- P-FG:2KVAC O/F -FG:100M Ohms / on  S EN/EN60601-1- illity  ty ptibility nunity  uption Telcordia SR-332 (  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100               | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2<br>0-3-3<br>0-4-2<br>0-4-3<br>0-4-4<br>0-4-5<br>0-4-6<br>0-4-8    | Test Level / N Class B Class B Class A  Test Level / N Level 4, 15KV Level 3, 10V/m Table 9, 9~28V/ Level 3, 2KV Level 4, 4KV/l Level 3, 10V Level 4, 30A/m 100% dip 1 perior 100% interruptic | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz) m(385MHz~5.78GHz)  Line-FG; 2KV/Line-Lin ds, 30% dip 25 periods,  |  |  |  |
| EMC                  | OPERATING ALTITUDE Note.6 SAFETY STANDARDS ISOLATION LEVEL WITHSTAND VOLTAGE ISOLATION RESISTANCE  EMC EMISSION  EMC IMMUNITY | 3000 meters  UL62368-1,TUV BS CAN/CSA-C22.2 No Primary-Secondary: I/P-O/P:4KVAC I/F I/P-O/P, I/P-FG, O/P Parameter Conducted emission Harmonic current Voltage flicker BS EN/EN55035, BS Parameter ESD  RF field susceptib EFT bursts Surge susceptibili Conducted susceptibili Conducted susceptibili Conducted susceptibili Conducted susceptibili Voltage dip, interri | EN/EN62368-1,IE60601-1:14 - Edit 2xMOPP, Primary- P-FG:2KVAC O/F -FG:100M Ohms / I  S EN/EN60601-1-  ility  ty ptibility nunity  uption  Telcordia SR-332 ( - 4" * 2" *1.14" inch  | C62368-1,IEC60601- ion 3 approved, TUV Earth:1xMOPP, Seco P-FG:1.5KVAC 500VDC / 25°C / 70%  Standard  BS EN/EN5501  BS EN/EN5501  BS EN/EN6100               | I, EAC TP TC 004,UL<br>BS EN/EN60601-1 a<br>ndary-Earth:1xMOPF<br>RH<br>1 (CISPR11)<br>1 (CISPR11)<br>0-3-2<br>0-3-3<br>0-4-2<br>0-4-3<br>0-4-4<br>0-4-5<br>0-4-6<br>0-4-8    | Test Level / N Class B Class B Class A  Test Level / N Level 4, 15KV Level 3, 10V/m Table 9, 9~28V/ Level 3, 2KV Level 4, 4KV/l Level 3, 10V Level 4, 30A/m 100% dip 1 perior 100% interruptic | ote  ote air; Level 4, 8KV conta (80MHz~2.7GHz) m(385MHz~5.78GHz)  Line-FG; 2KV/Line-Line ds, 30% dip 25 periods, |  |  |  |

- 4. Tolerance : includes set up tolerance, line regulation and load regulation.
- NOTE
- 5. Touch current was measured from primary input to DC output.
  6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
  7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.

  - 8. Heat Sink HS1, HS2 can not be shorted.
  - The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm\*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
     (as available on http://www.meanwell.com)
  - ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

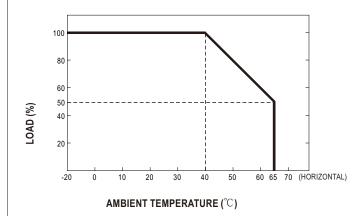


#### ■ Block Diagram

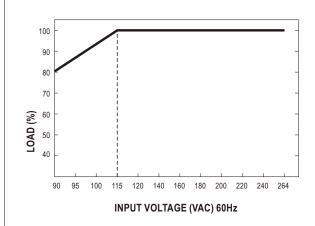


fosc: 100KHz

### ■ Derating Curve

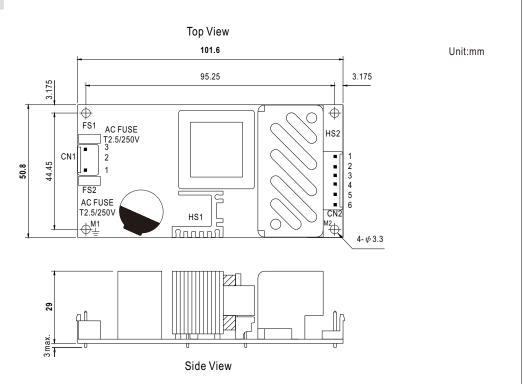


### ■ Output Derating VS Input Voltage





#### ■ Mechanical Specification



### AC Input Connector (CN1): JST B3P-VH or equivalent

| Pin No. | Assignment | Mating Housing           | Terminal                          |
|---------|------------|--------------------------|-----------------------------------|
| 1       | AC/N       | ICTVIID                  | ICT CVIII 24T D4 4                |
| 2       | No Pin     | JST VHR<br>or equivalent | JST SVH-21T-P1.1<br>or equivalent |
| 3       | AC/L       | 3. 344.7410111           | 3. 344.7410111                    |

### DC Output Connector (CN2): JST B6P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal         |
|---------|------------|----------------|------------------|
| 1,2     | V1         |                |                  |
| 3,4     | COM        | JST VHR        | JST SVH-21T-P1.1 |
| 5       | V2         | or equivalent  | or equivalent    |
| 6       | V3         |                |                  |

### $\pm$ : Grounding Required



1.HS1,HS2 cannot be shorted.

2.M1 is safety ground. For better EMC performance, Please secure an electrical connection between M1,M2 and chassis grounding.

#### ■ Installation Manual

Please refer to: http://www.meanwell.com/manual.html