

# IUU80 SERIES

## 80W U-bracket Switching Power Supplies For Industrial Equipment

### Description:

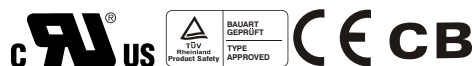
The IUU80 series of compact, open frame constructed, AC/DC switching mode power supplies provide 80 Watts of continuous output power. They are suited for use in disc drive systems, microprocess or based systems, portable equipments and many other applications. All models meet FCC Part-15 class B and CISPR-22 class B emission Limits and are designed to comply with UL/c-UL(UL 60950-1), TUV/Bauart(EN 60950-1) and new CE requirements. All units are 100% burned in and tested.



### Features:

- Wide Input Voltage 90 to 260 VAC, 47 to 63 Hz
- Internal EMI filter
- Dual and Triple Output
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal
- Input Surge Current, Over Voltage and Over Load protection
- Over Voltage Protection (Crowbar Design)
- Power Factor Correction
- Class I
- Operating temperature -20~70°C
- 2 year warranty

### Safety Approvals :



### Electrical Characteristics:

| Sym.   | Parameter                     | Test Conditions                            | Min.             | Typ. | Max. | Unit |
|--------|-------------------------------|--------------------------------------------|------------------|------|------|------|
| Vin    | Input Voltage                 | Operating Voltage                          | 90               |      | 260  | VAC  |
| fin    | Input Frequency               |                                            | 47               |      | 63   | Hz   |
| PF     | Power Factor Correction       | Io=Full load, Vin=90~260VAC                | 0.95             | 0.97 | 1.0  |      |
| Po     | Output Power Range            | Vin=90 to 260 VAC                          | 0                |      | 80   | W    |
| Vo     | Output Voltage Range          |                                            | See rating Chart |      |      | V    |
| Io     | Output Current Range          |                                            | See rating Chart |      |      | A    |
| Iil    | Input Current (Low Line)      | Io=Full load, Vin=115VAC                   |                  |      | 2.0  | A    |
| Iih    | Input Current (High Line)     | Io=Full load, Vin=230VAC                   |                  |      | 1.0  | A    |
| Irl    | Low Line Inrush Current       | Io=Full load, 25°C, Cool start, Vin=115VAC |                  | 12   | 15   | A    |
| Irhl   | High Line Inrush Current      | Io=Full load, 25°C, Cool start, Vin=230VAC |                  | 26   | 30   | A    |
| Eff    | Efficiency                    | Io=Full load, Vin=230VAC                   | 70               | 80   | 85   | %    |
| REG-i  | Line Regulation               | Io=Full load                               |                  | 0.5  | 1    | %    |
| REG-o  | Load Regulation               | Vin=230VAC                                 |                  | 5    | 7    | %    |
| OVP    | Over Voltage Protection       |                                            | 112              |      | 132  | %    |
| OCP    | Over Current Protection       |                                            | 110              |      | 150  | %    |
| Ttr    | Time of Transient Response    | Io=Full load to Half Load, Vin=100VAC      |                  |      | 4    | mS   |
| Thold  | Hold-Up Time                  | Io=Full load, Vin=110VAC                   | 16               |      |      | mS   |
| Ts     | Start Up Time                 | Io=Full load, Vin=100VAC                   | 0.3              | 1    | 2    | S    |
| * Vp-p | Ripple & Noise (Peak to Peak) | Full load, Vin=90VAC                       |                  | 0.5  | 1    | %    |
| Ilk    | Safety Ground Leakage Current | Io=Full load, Vin=240VAC                   |                  | 0.4  | 0.75 | mA   |
| TC     | Temperature Coefficient       | All output                                 | -0.04            |      | 0.04 | %/°C |

\* Note: The Ripple & Noise which is under 3.3VDC at 2% max

### Environmental :

| Sym.  | Parameter                                                   | Test Conditions | Min. | Typ. | Max. | Unit  |
|-------|-------------------------------------------------------------|-----------------|------|------|------|-------|
| Toper | Operating Temperature                                       |                 | -20  |      | 70   | °C    |
| Tstg  | Storage Temperature                                         |                 | -40  |      | 85   | °C    |
| Hr    | Relative Humidity                                           |                 | 5    |      | 95   | %     |
| MTBF  | Operating Temperature at 25°C, Calculated per MIL-HDBK-217F |                 | 0.1  |      |      | M Hrs |
| Pd    | Derate linearly from 100% load at 50°C to 50% load at 70°C  |                 |      |      |      |       |

IUU80 SERIES

80W U-bracket Switching Power Supplies For Industrial Equipment  
Safety Specifications:

| Sym.  | Parameter                                                | Test Conditions      | Min. | Typ. | Max. | Unit  |
|-------|----------------------------------------------------------|----------------------|------|------|------|-------|
| Vps   | Dielectric Withstanding Voltage for Primary to secondary | Primary to secondary | 4242 |      |      | VDC   |
| Vpg   | Dielectric Withstanding Voltage for Primary to Ground    | Primary to ground    | 2121 |      |      | VDC   |
| Ris   | Isolation Resistance                                     | Test Voltage=500VDC  | 50   |      |      | M Ω   |
| CISPR | EMI requirements for CISPR-22                            | Vin=220VAC           | B    |      |      | CLASS |
| FCC   | EMI requirements for FCC PART-15                         | Vin=110VAC           | B    |      |      | CLASS |

Output Voltage And Current Rating Chart ( Multi Output ) :

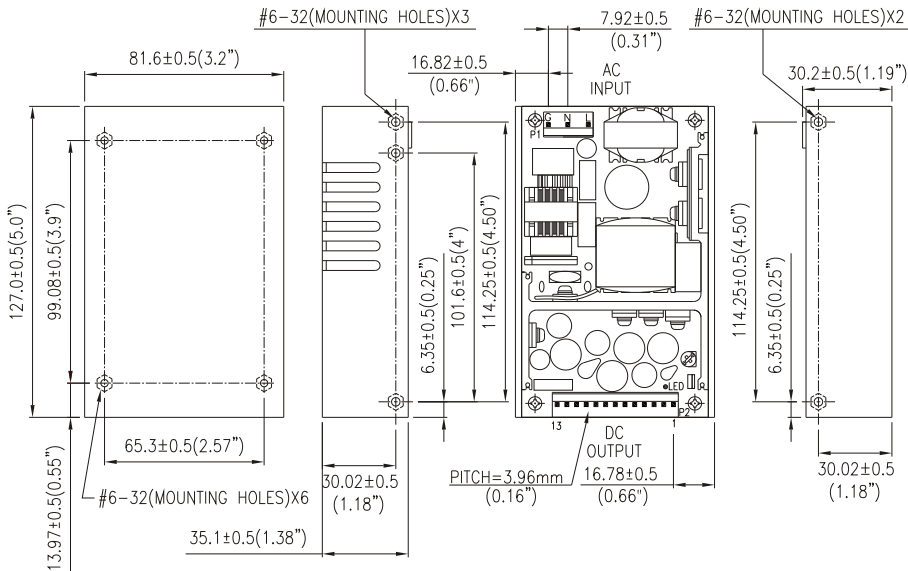
| Model Number | Output#1 |       |       |        | Output#2 |       |       |        | Output#3 |       |       |        | Maximum Output Power |
|--------------|----------|-------|-------|--------|----------|-------|-------|--------|----------|-------|-------|--------|----------------------|
|              | Vonom    | Iomin | Iomax | Regmax | Vonom    | Iomin | Iomax | Regmax | Vonom    | Iomin | Iomax | Regmax |                      |
| IUU80-200    | +3.3V    | 1.2A  | 12A   | 7%     | +12V     | 0.5A  | 5A    | 5%     |          |       |       |        | 80W                  |
| IUU80-201    | +5V      | 1.2A  | 12A   | 5%     | +12V     | 0.5A  | 5A    | 5%     |          |       |       |        | 80W                  |
| IUU80-202    | +5V      | 1.2A  | 12A   | 5%     | +15V     | 0.5A  | 5A    | 5%     |          |       |       |        | 80W                  |
| IUU80-203    | +5V      | 1.2A  | 12A   | 5%     | +24V     | 0.3A  | 3A    | 5%     |          |       |       |        | 80W                  |
| IUU80-204    | +3.3V    | 1.2A  | 12A   | 7%     | +5V      | 0.5A  | 5A    | 5%     |          |       |       |        | 64.6W                |
| IUU80-215    | +5V      | 1.2A  | 12A   | 5%     |          |       |       |        | -24V     | 0A    | 2A    | 5%     | 80W                  |
| IUU80-300    | +3.3V    | 1.2A  | 12A   | 7%     | +12V     | 0.5A  | 5A    | 5%     | -12V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-300-1  | +3.3V    | 1.2A  | 12A   | 7%     | +12V     | 0.5A  | 5A    | 5%     | +12V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-301    | +5V      | 1.2A  | 12A   | 5%     | +12V     | 0.5A  | 5A    | 5%     | -5V      | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-301-1  | +5V      | 1.2A  | 12A   | 5%     | +12V     | 0.5A  | 5A    | 5%     | +5V      | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-302    | +5V      | 1.2A  | 12A   | 5%     | +12V     | 0.5A  | 5A    | 5%     | -12V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-302-1  | +5V      | 1.2A  | 12A   | 5%     | +12V     | 0.5A  | 5A    | 5%     | +12V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-303    | +5V      | 1.2A  | 12A   | 5%     | +15V     | 0.5A  | 5A    | 5%     | -15V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-303-1  | +5V      | 1.2A  | 12A   | 5%     | +15V     | 0.5A  | 5A    | 5%     | +15V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-304    | +5V      | 1.2A  | 12A   | 5%     | +24V     | 0.3A  | 3A    | 5%     | -24V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-304-1  | +5V      | 1.2A  | 12A   | 5%     | +24V     | 0.3A  | 3A    | 5%     | +24V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-305    | +5V      | 1.2A  | 12A   | 5%     | +24V     | 0.3A  | 3A    | 5%     | -12V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-305-1  | +5V      | 1.2A  | 12A   | 5%     | +24V     | 0.3A  | 3A    | 5%     | +12V     | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-306    | +3.3V    | 1.2A  | 12A   | 7%     | +12V     | 0.5A  | 5A    | 5%     | -5V      | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-306-1  | +3.3V    | 1.2A  | 12A   | 7%     | +12V     | 0.5A  | 5A    | 5%     | +5V      | 0A    | 0.8A  | 5%     | 80W                  |
| IUU80-307    | +5V      | 1.2A  | 12A   | 5%     | +10V     | 0.5A  | 5A    | 5%     | -10V     | 0A    | 1.0A  | 5%     | 80W                  |
| IUU80-307-1  | +5V      | 1.2A  | 12A   | 5%     | +10V     | 0.5A  | 5A    | 5%     | +10V     | 0A    | 1.0A  | 5%     | 80W                  |
| IUU80-308    | +3.3V    | 1.2A  | 12A   | 7%     | +5V      | 0.5A  | 5A    | 5%     | -12V     | 0A    | 1.0A  | 5%     | 76.6W                |
| IUU80-308-1  | +3.3V    | 1.2A  | 12A   | 7%     | +5V      | 0.5A  | 5A    | 5%     | +12V     | 0A    | 1.0A  | 5%     | 76.6W                |

PIN CHART

| MODEL           | PIN | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| IUU80-215-13PIN | N/C | N/C | Vo1 | Vo1 | Vo1 | Vo1 | COM | COM | COM | COM | Vo3 | COM | COM | N/C |
| IUU80-2XX-13PIN | Vo2 | Vo2 | Vo1 | Vo1 | Vo1 | Vo1 | COM | COM | COM | COM | N/C | COM | COM | N/C |
| IUU80-3XX-13PIN | Vo2 | Vo2 | Vo1 | Vo1 | Vo1 | Vo1 | COM | COM | COM | COM | Vo3 | COM | COM | N/C |

Note: Vo1:Output#1 Vo2:Output#2 Vo3:Output#3

Mechanical Specifications :



Note:

- 1. Dimensions are shown in mm.
- 2. Weight: 480gs approx.
- 3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 series crimp terminal.
- 4. Output connector mates with Molex housing 09-50-3131 and Molex 2478 series crimp terminal.