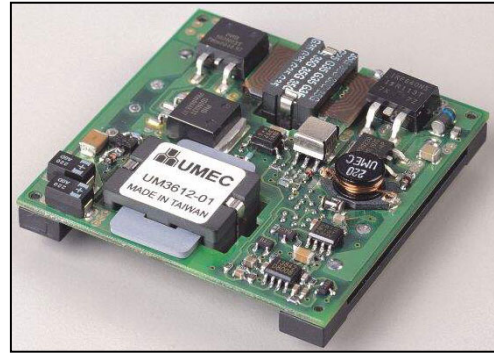


# UM3600 SERIES

## 20 – 50 Watt DC/DC Converters

- ◆ 2:1 Input Range
- ◆ 20-50 W Isolated Output
- ◆ High-Density
- ◆ Standard “Half-Brick” Package
- ◆ Open-Frame
- ◆ Remote on/off Control
- ◆ Safety Approvals Pending(EN60950 and UL/cUL)



### SPECIFICATIONS

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

#### INPUT SPECIFICATIONS

|                                |                 |
|--------------------------------|-----------------|
| Input Voltage Range, 24V ..... | 18-36V          |
| 48V .....                      | 36-75V          |
| Input Voltage peak/surge.....  | 100V/100ms max. |
| Input Filter .....             | Pi Network      |

#### OUTPUT SPECIFICATIONS

|   |                |
|---|----------------|
| Voltage Accuracy <sup>1</sup> .....       | ±1.5%max.      |
| Transient Response <sup>2</sup>           |                |
| Single, 25% step Load Change .....        | <500u sec.     |
| External Trim Adj. Range .....            | ±10%           |
| Short Circuit Protection .....            | Continuous     |
| Line Regulation <sup>3</sup> .....        | ±0.5% max.     |
| Load Regulation <sup>4</sup> .....        | ±1% max.       |
| Ripple and Noise, 20MHz BW <sup>5</sup> , |                |
| 2V, 3.3V, 5V .....                        | 100mV p-p max. |
| 12V, 18V.....                             | 200mV p-p max. |
| 24V .....                                 | 250mV p-p max. |
| Overvoltage Protection                    |                |
| 2.0V .....                                | 2.6V typ.      |
| 3.3V .....                                | 4.3V typ.      |
| 5.0V .....                                | 6.8V typ.      |
| 12V .....                                 | 15V typ.       |
| 18V .....                                 | 24V typ.       |
| 24V .....                                 | 30V typ.       |

#### GENERAL SPECIFICATIONS

|  |   |
|--|---|
| Efficiency .....                                   | See Table                                       |
| Isolation Voltage .....                            | 1500VDCmin.                                     |
| Switch Frequency .....                             | 250KHz  |
| Isolation Resistance <sup>6</sup> .....            | 10 <sup>8</sup> Ohms min.                       |
| Over temperature shutdown point <sup>7</sup> ..... | 125°C typ.                                      |
| Operation Temperature <sup>8</sup> .....           | -40°C to +120°C                                 |
| Storage Temperature Range .....                    | -55°C to +125°C                                 |
| EMI/RFI Conducted.....                             | EN55022 Level A                                 |
| Dimensions .....                                   | 2.40*2.28*0.43 inches<br>(60.96*57.91*10.90 mm) |
| Weight .....                                       | 50g   |



**UMEC  
INTERNATIONAL**

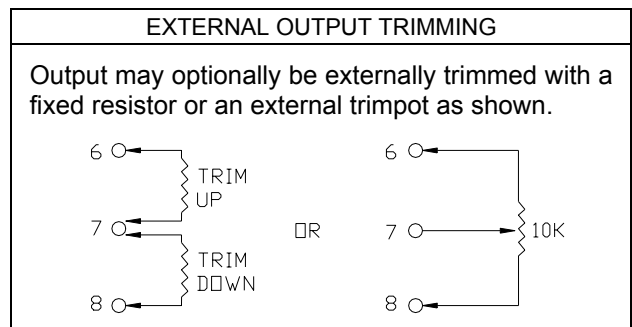
UM3600

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### NOTE

1. Defined at the static output regulation at 25°C, including initial setting accuracy, Line voltage within stated limits and load current within stated limits.
2. di/dt=100mA/1uS ,Tc=25°C; load change=0.5Io max. to 0.75 Io max. and 0.75 Io max. to 0.5 Io max.
3. Measured from high line to low line.
4. Measured from full load to 1/4 load.
5. Measured with 2.2uF ceramic Cap. Cross to output.
6. Measured with 500VDC
7. Non-latching shutdown protection
8. Defined as the highest temperature measured at any one of the specified temperature hotspot checkpoints.
9. Standard product is active high, active low remote on/off option is available, to order suffix a “N” to the model number e.g. UM3611N.

| REMOTE ON/OFF CONTROL    |                            |
|--------------------------|----------------------------|
| Logic Compatibility..... | CMOS or Open Collector TTL |
| Ec-ON .....              | > +2.5 VDC or Open Circuit |
| Ec-OFF .....             | < 0.8 VDC                  |
| Control Common .....     | Referenced to Input Minus  |



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REV.5

