

## Low Profile Dual & Triple Output

- ◆ 26mm height
- ◆ Outputs 2 and 3 isolated from output 1
- ◆ Universal Input (85 - 265VAC)

\* **RoHS**



### Key Market Segments & Applications

|                    |                                                                                                                 |
|--------------------|-----------------------------------------------------------------------------------------------------------------|
| Factory Automation | Process Control, NC-Machining, Automotive, Packaging Equipment, Materials Handling, Chemical Processing, Robots |
| Test & Measurement | Burn-in & Test, Automated Test, Instrumentation, Measurement, Detection                                         |
| Automated Service  | Vending Machines, Elevators, Video Gaming, Point of Sale Equipment                                              |

### Features and Benefits

| Feature                        | Benefit                                       |
|--------------------------------|-----------------------------------------------|
| ◆ Low Profile                  | ◆ Assists System Integration                  |
| ◆ Isolated 2nd and 3rd outputs | ◆ Enable series operation for higher voltages |
| ◆ Wattbox design on LWT        | ◆ Power trading between outputs               |

### Specifications

| MODEL                          |    | LWD15                                                                                                                                            | LWD30     | LWT15H                                          | LWT30H       | LWT50H  |
|--------------------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------|--------------|---------|
| ITEMS                          |    |                                                                                                                                                  |           |                                                 |              |         |
| Max Output Power (typ)         | W  | 15                                                                                                                                               | 30        | 17                                              | 30           | 50      |
| Efficiency (Typ)               | %  | 64                                                                                                                                               | 70        | 72                                              | 73           | 72      |
| AC Input Voltage range         | -  | 85 - 265VAC (47 - 440Hz)                                                                                                                         |           |                                                 |              |         |
| DC Input Voltage range         | -  | 110 - 350VDC                                                                                                                                     |           |                                                 | 110 - 330VDC |         |
| Input Current Typ (100/200VAC) | A  | 0.4/0.2                                                                                                                                          | 0.72/0.36 | 0.4/0.22                                        | 0.7/0.42     | 1.2/0/7 |
| Inrush Current (110/200VAC)    | A  | 17/34                                                                                                                                            | 14/28     | 14/28                                           | 16/32        | 16/32   |
| Output 1 Voltage Adjustment    | -  | 5V: 5 to 5.25V, 12V: 12 to 12.6V, 15V: 15V to 15.75V                                                                                             |           |                                                 |              |         |
| Output Voltage Accuracy        | -  | Output 2 $\pm 5\%$                                                                                                                               |           | Output 2 & 3 $\pm 5\%$                          |              |         |
| Temperature Coefficient        | -  | Output 1 < 1%, Output 2 or 3, <2% at 0 - 60°C                                                                                                    |           |                                                 |              |         |
| Line Regulation                | -  | 1%                                                                                                                                               |           |                                                 |              |         |
| Load Regulation                | -  | 2%                                                                                                                                               |           |                                                 |              |         |
| Ripple & Noise                 | -  | 5V:100mV, 12V & 15V: 150mV, 24V: 200mV                                                                                                           |           | Output 1: 100mV, Outputs 2 & 3: 150mV           |              |         |
| Overcurrent Protection         | -  | >105%                                                                                                                                            |           |                                                 |              |         |
| Overvoltage Protection         | V  | Main output only: 5.75 - 6.75V, manual reset                                                                                                     |           |                                                 |              |         |
| Hold Up Time (Typ at 100VAC)   | ms | 20                                                                                                                                               |           |                                                 |              |         |
| Series Operation               | -  | Possible                                                                                                                                         |           |                                                 |              |         |
| Operating Temperature          | -  | LWD: 0°C to +60°C, derate as follows: 40°C: 100%, 50°C: 60%, 60°C: 40%<br>LWT: 0°C to +60°C, derate as follows: 40°C: 100%, 50°C: 80%, 60°C: 60% |           |                                                 |              |         |
| Storage Temperature            | °C | -30 to +85°C                                                                                                                                     |           |                                                 |              |         |
| Operating Humidity             | -  | 30 - 90% RH (Non condensing)                                                                                                                     |           |                                                 |              |         |
| Storage Humidity               | -  | 10 - 95% RH (Non condensing)                                                                                                                     |           |                                                 |              |         |
| Cooling                        | -  | Convection                                                                                                                                       |           |                                                 |              |         |
| Withstand Voltage              | -  | Input to Gnd, Input to Output 2kVAC (20mA)                                                                                                       |           | Input to Gnd 2kVAC Input to Output 3kVAC (20mA) |              |         |
| Isolation Resistance           | -  | >100M at 25C & 70%RH, Output to Ground 500VDC                                                                                                    |           |                                                 |              |         |
| Vibration (non operating)      | -  | 19.6m/s <sup>2</sup>                                                                                                                             |           | 10-55Hz(1 min) <19.6m/s <sup>2</sup> (1 hr)     |              |         |
| Shock                          |    | 196.1m/s <sup>2</sup>                                                                                                                            |           |                                                 |              |         |
| Safety Agency Approvals        | -  | -                                                                                                                                                |           | UL60950-1, CSA60950-1, EN60950-1, CE LVD        |              |         |
| Conducted EMI                  | -  | FCC Class A                                                                                                                                      |           | VDE Class B, FCC Class B                        |              |         |
| Weight (Typ)                   | g  | 180                                                                                                                                              | 250       | 220                                             | 300          | 400     |
| Size (WxHxD)                   | mm | Please refer to outline drawings                                                                                                                 |           |                                                 |              |         |
| Warranty                       | -  | One Year                                                                                                                                         |           |                                                 |              |         |

\* LWT models only

Not recommended for new design highlighted in green

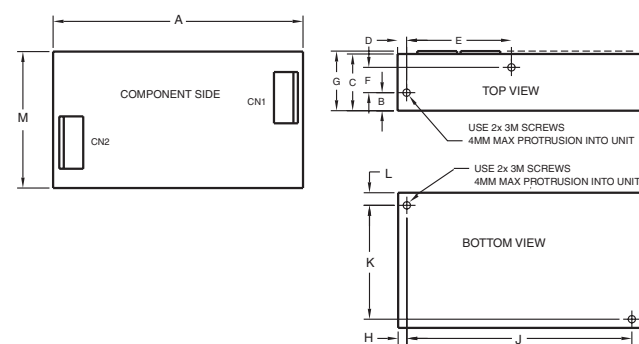
Note: See Installation Manual for full details, test methods of parameters and application notes

## Output Ratings

| Model                     | Output | Voltage | Min Current | Max Current |
|---------------------------|--------|---------|-------------|-------------|
| LWD15-0512 <sup>(1)</sup> | V1     | 5V      | 0.0         | 1.5         |
|                           | V2     | 12V     | 0.0         | 0.6         |
| LWD15-0524 <sup>(1)</sup> | V1     | 5V      | 0.0         | 1.5         |
|                           | V2     | 24V     | 0.0         | 0.3         |
| LWD15-1212 <sup>(1)</sup> | V1     | 12V     | 0.0         | 0.6         |
|                           | V2     | 12V     | 0.0         | 0.6         |
| LWD15-1224 <sup>(1)</sup> | V1     | 12V     | 0.0         | 0.6         |
|                           | V2     | 24V     | 0.0         | 0.3         |
| LWD15-1515 <sup>(1)</sup> | V1     | 15V     | 0.0         | 0.5         |
|                           | V2     | 15V     | 0.0         | 0.5         |
| LWD30-0512 <sup>(1)</sup> | V1     | 5V      | 0.0         | 3.0         |
|                           | V2     | 12V     | 0.0         | 1.2         |
| LWD30-0524 <sup>(1)</sup> | V1     | 5V      | 0.0         | 3.0         |
|                           | V2     | 24V     | 0.0         | 0.6         |
| LWD30-1212 <sup>(1)</sup> | V1     | 12V     | 0.0         | 1.2         |
|                           | V2     | 12V     | 0.0         | 1.2         |
| LWD30-1224 <sup>(1)</sup> | V1     | 12V     | 0.0         | 1.2         |
|                           | V2     | 24V     | 0.0         | 0.6         |
| LWD30-1515 <sup>(1)</sup> | V1     | 15V     | 0.0         | 1.0         |
|                           | V2     | 15V     | 0.0         | 1.0         |
| LWT15H-522                | V1     | 5V      | 0.5         | 3.0         |
|                           | V2     | +12V    | 0.0         | 0.6         |
|                           | V3     | -12V    | 0.0         | 0.4         |
| LWT15H-5FF                | V1     | 5V      | 0.5         | 3.0         |
|                           | V2     | +15V    | 0.0         | 0.6         |
|                           | V3     | -15V    | 0.0         | 0.4         |
| LWT15H-525                | V1     | 5V      | 0.5         | 3.0         |
|                           | V2     | +12V    | 0.0         | 0.6         |
|                           | V3     | -5V     | 0.0         | 0.4         |
| LWT30H-522                | V1     | 5V      | 0.7         | 5.0         |
|                           | V2     | +12V    | 0.0         | 1.2         |
|                           | V3     | -12V    | 0.0         | 0.6         |
| LWT30H-5FF                | V1     | 5V      | 0.7         | 5.0         |
|                           | V2     | +15V    | 0.0         | 1.2         |
|                           | V3     | -15V    | 0.0         | 0.6         |
| LWT30H-525                | V1     | 5V      | 0.7         | 5.0         |
|                           | V2     | +12V    | 0.0         | 1.2         |
|                           | V3     | -5V     | 0.0         | 0.6         |
| LWT50H-522                | V1     | 5V      | 1.0         | 8.0         |
|                           | V2     | +12V    | 0.0         | 1.5         |
|                           | V3     | -12V    | 0.0         | 1.0         |
| LWT50H-5FF                | V1     | 5V      | 1.0         | 8.0         |
|                           | V2     | +15V    | 0.0         | 1.5         |
|                           | V3     | -15V    | 0.0         | 1.0         |
| LWT50H-525                | V1     | 5V      | 1.0         | 8.0         |
|                           | V2     | +12V    | 0.0         | 1.5         |
|                           | V3     | -5V     | 0.0         | 1.0         |

(1) Not recommended for new design

## LW Outline Drawing



### DIMENSIONS:

| MODEL  | A               | B             | C              | D              | E                | F              | G              | H              | J                | K               | L              | M              | WEIGHT: LBS |
|--------|-----------------|---------------|----------------|----------------|------------------|----------------|----------------|----------------|------------------|-----------------|----------------|----------------|-------------|
| LWT-15 | 5.03<br>(128.0) | .31<br>(7.9)  | .98<br>(25.0)  | .15<br>(3.8)   | 1.811<br>(46.0)  | .433<br>(11.0) | 1.02<br>(26.0) | .15<br>(3.8)   | 3.897<br>(99.0)  | 1.988<br>(50.5) | .21<br>(5.3)   | 2.36<br>(59.9) | LWT-15 .50  |
| LWT-30 | 6.29<br>(160.0) | .47<br>(12.0) | .98<br>(25.0)  | 1.77<br>(45.0) | 3.937<br>(99.9)  | .314<br>(8.0)  | 1.02<br>(26.0) | .66<br>(17.0)  | 5.433<br>(138.0) | .905<br>(23.0)  | 1.69<br>(43.0) | 2.75<br>(70.0) | LWT-30 .70  |
| LWT-50 | 6.29<br>(159.7) | .35<br>(8.8)  | 1.02<br>(26.0) | .39<br>(10.0)  | 4.625<br>(117.5) | .433<br>(11.0) | -              | 1.67<br>(42.4) | 3.602<br>(91.5)  | 3.228<br>(82.0) | .31<br>(7.8)   | 3.82<br>(97.0) | LWT-50 1.00 |
| LWD-15 | 4.32<br>(109.7) | .31<br>(7.9)  | .98<br>(25.0)  | .15<br>(3.8)   | 1.812<br>(46.0)  | .437<br>(11.0) | 1.03<br>(26.1) | .15<br>(3.8)   | 3.890<br>(98.8)  | 1.988<br>(50.5) | .21<br>(5.3)   | 2.36<br>(59.9) | LWD-15 .50  |
| LWD-30 | 5.75<br>(146.0) | .48<br>(12.1) | .98<br>(25.0)  | 1.37<br>(34.9) | 3.937<br>(99.9)  | .312<br>(7.9)  | 1.03<br>(26.1) | .28<br>(7.1)   | 5.437<br>(138.0) | .906<br>(23.0)  | 1.29<br>(32.7) | 2.36<br>(59.9) | LWD-30 .70  |
| LWD-50 | 6.29<br>(159.7) | .35<br>(8.8)  | .98<br>(25.0)  | .39<br>(9.9)   | 4.625<br>(117.4) | .437<br>(11.0) | 1.03<br>(26.1) | 1.67<br>(42.4) | 5.437<br>(138.0) | 3.234<br>(82.1) | .31<br>(7.8)   | 3.81<br>(96.7) | LWD-50 1.00 |

1. DIMENSIONS ARE IN INCHES EXCEPT DIMENSIONS IN ( ) ARE IN MM.
2. 4x M3 TAPPED HOLES FOR CUSTOMER MTG. SCREWS MUST NOT PROTRUDE INTO P.S. BY MORE THAN .15 (4) MAX.

## Other Lambda Industrial Products

|     |                                      |
|-----|--------------------------------------|
| HWS | 15W-1500W Single output              |
| ZWQ | 80W-170W Quad output                 |
| ZP  | 20W-60W Single, dual & triple output |
| LS  | 25-150W Single output, low cost      |

For Additional Information, please visit  
[us.tdk-lambda.com/llp/products/lw-series.htm](http://us.tdk-lambda.com/llp/products/lw-series.htm)