Baltled
Product Catalogue
2015

LED Modules
and accessories
### Optic
- Developed exclusive optic design
- Effective light distribution
- >90% light transmittance

### Components
- LM-80 LED certified
- McAdam 3 step color range
- 8 KV ESD protection
- Reverse voltage protection
- Bypass circuit protection
- 145 lm/W LED efficiency
- CRI>80
- Safe LED forward current
- L70% 45,000 hours

### Housing
- Exclusive housing design
- -30° ~ +80° High - Low temperature cycles test passed
- Quick mounting design
- IP 66

### Circuit
- Safe Thermal Design
- Metal Core PCB
- 36 OZ. copper layer thickness
- Direct LED heat sing soldering
- Constant Current design
- Tinned copper wires
- > 20 AWG cables improves electrical conductivity
- Quick-fix wires
STAR
NEW

Best over 150 mm depth large size light boxes

Created for:
- Illumination of big depth light boxes over 150 mm with very fast installation
- Special lens for best uniformity 600 mm distance between centers for most effective price of led solution

Special features:
- Unique 160 degree Optical Lens diffuser
- Powered by Phillips LED
- LM-80 LED certified
- Carbon fibre housing
- New technology PCB

Applications:
- Big letters from 200 mm depth
- One-sided light box from 150 mm depth

Other features:
- Long operating life - 60 000 h@L70
- High Efficiency over 110 lm/W
- Made in Japan
- IP - 66/67
Best for 140-200 mm depth
double sided light boxes

**Created for:**
- High brightness illumination of big depth
double sided light boxes
- Unique and patented design
- Ultra Efficient heat cooling system
- Optimal for 140-200 mm depth illumination

**Special features:**
- Unique Optical Lens diffuser
- Powered by Phillips LED
- LM-80 LED certified
- Carbon fibre housing
- New technology PCB

**Applications:**
- Double sided light boxes with depths over 140 mm
- Maximum height 2000 mm
- Bus shelters
- City lights

**Other features:**
- Long operating life - 60 000 h@L70
- High Efficiency over 110 lm/W
- Made in Japan
- IP - 66/67
TWIN NEW

Best for 140-200 mm depth double sided light boxes

Created for:
- Illuminate medium and big size double sided light boxes and signs
- Faster installation

Special features:
- Unique Optical Lens diffuser
- Powered by Phillips LED
- LM-80 LED certified
- Carbon fibre housing
- New technology PCB

Applications:
- Double sided light boxes with depth over 140 mm
- Maximum height 2000 mm
- Bus shelters
- City lights

Other features:
- Long operating life - 60 000 h@L70
- High Efficiency over 105 lm/W
- Made in Japan
- IP - 66/67
Best for 80-140mm small and medium size double sided signs and light boxes

450 lm  4,2 W  IP 66  IP 67

Created for:
- Illuminate small and medium size double sided light boxes and signs
- Faster installation
- Optimal use under 700 mm length size light box only with one side installation

Special features:
- Special acrylic double beam angle lens
- Powered by Phillips LED
- LM-80 LED certified
- Carbon fibre housing
- New technology PCB

Applications:
- Small and medium size double sided light boxes
- Small and medium size signs
- Airport signs

Other features:
- Long operating life - 60 000 h @ L70
- High Efficiency over 105 lm/W
- Made in Japan
- IP - 66/67
Best for 150-200 mm depth light boxes and channel letters

**Created for:**
- Illumination of medium - big depth light boxes and channel letters
- Best for budget solution
- Faster installation
- Optimal for 150 - 250 mm depth illumination

**Special features:**
- Constant current controllers to insure led lifetime
- One hole installation saves 40% of time
- Bright Uniform illumination from 3 diode platform module

**Applications:**
- Big letters from 150 mm depth
- One sided light box from 200 mm depth
- High brightness letters from 100 mm depth

**Other features:**
- Operating life time - 25 000 h@L70 at 50°C
- High Efficiency over 90 lm/W
- High CRI > 75
- IP - 67
Q4
NEW

Best over 200 mm depth light boxes and big channel letters

90 lm  2 W  IP 67

Created for:
- Illumination of medium - big depth light boxes and channel letters
- Best for budget solution
- Faster installation
- Optimal for 200-300 mm depth illumination

Special features:
- Constant current controllers to insure led lifetime
- Special and unique LED inside allows to cut between every single module
- Bright Uniform illumination from 4 diode platform module

Applications:
- Huge letters from 200 mm depth
- High Brightness Big letters from 150 mm depth
- High Brightness One sided light box from 200 mm depth

Other features:
- Operating life time - 25 000 h@L70 at 50°C
- High Efficiency over 90 lm/W
- High CRI > 75
- IP - 67
Best for middle depth double sided light box

230 lm  2,2 W  IP 66

- Lumens per module - 230 lm
- Power per module - 2,2W
- 700 mA Constant current driving system
- IC - Led protector inside
- Special Elliptical lens

- High Efficiency over 100 Lm/W
- Operating life – 45 000 h
- Depth starts only from 160 mm
- Solution for Bus station
- 5 Years Warranty based on 12h/day

LED (Crown DUO H41): 1344 pcs
Power (BP-C700-340): 96 pcs
H32

Best for middle depth double sided light box

107±4 lm  1,2 W  IP 66

- Lumens per module - 107 lm
- Power per module - 1,2W
- 350 mA Constant current driving system
- IC - Led protector inside
- Special Elliptical lens
- High Efficiency over 90 Lm/W
- Operating life – 45 000 h
- Depth starts only from 120 mm
- 5 Years Warranty based on 12h/day
R21

Best for big depth double sided light box

- Lumens per module - 205 lm
- Power per module - 2.4 W
- 700 mA Constant current driving system
- IC LED protector inside
- Special Elliptical lens

- High Efficiency 85 Lm/W
- Operating lifetime – 25 000 h
- Depth starts only from 160 mm
- Solution for Bus station
- 3 Years Warranty based on 12h/day

LED (Crown DUO R21): 36 pcs
Power (BP-C/700-340): 3 pcs
Best for middle depth Double sided light box

- Lumens per module - 110 lm
- Power per module - 1,2 W
- 350 mA Constant current driving system
- Special Elliptical lens
- High Efficiency 90 - 92 Lm/W
- Operating lifetime – 25 000 h
- Depth starts only from 100 mm
- 3 Years Warranty based on 12h/day

LED (Crown DUO R13): 68 pcs
Power (BP-C350-170): 6 pcs
Best for small depth channel letters and light box illumination

- Lumens per module 32-35 lm
- Power per module - 0.35 W
- Constant current controllers
- High Efficiency 100 Lm/W
- Special optics angle - 160°

- One hole installation – 40% time saving
- Operating lifetime – 45 000 h
- Application Depth starts only from 30 mm
- 5 Years Warranty based on 12h/day

LED (Crown OPTO P14): 142 pcs
Power (BP-V12-600): 1 pcs
Special design for middle depth channel letters

- Lumens per module 58 - 62 lm
- Power per module - 0,6 W
- Constant current controllers
- High Efficiency 100 Lm/W
- Special optics angle - 160°
- One hole installation – 40% time saving
- Operating lifetime – 45 000 h
- Powered by Nichia LED
- 5 Years Warranty based on 12h/day

LED (Snow PRO P25): 385 pcs
Power (BP-V12-1000): 2 pcs
(BP-V12-360): 1 pcs
Best for deep depth One sided channel letters

- Lumens per module - 120 lm
- Power per module - 1.2 W
- Constant current controllers
- Powered by Samsung LED
- High CRI - 85

- High Efficiency - 100 Lm/W
- Optimal depths over 200 mm
- Operating time - 45 000 h
- 5 Years Warranty based on 12h/day

LED (Snow PRO S44): 1310 pcs
Power (BP-V12-1000): 16 pcs
**S45**

Best for deep depth one sided light box and channel letters

- **120 lm**
- **1,2 W**
- **IP 66**

- Lumens per module - 120 lm
- Power per module - 1,2 W
- Constant current controllers
- Powered by Samsung LED
- High CRI - 85

- High Efficiency - 100 Lm/W
- Optimal depths over 200 mm
- Operating time - 45 000 h
- One hole installation
- 5 Years Warranty based on 12h/day

LED (Snow PRO S45): 824 pcs
Power (BP-V12-360): 2 pcs
(BP-V12-600): 9 pcs; (BP-V12-1000): 5 pcs

SignComp Europe Ltd, SignComp House, Blatchford Road, West Sussex, RH13 5QR
Tel; +44 (0) 1403 272704 Fax; +44 (0) 1403 266921 Email; sales@signcompeurope.com
Web; www.signcompeurope.com
Snow Mini S12

Best for small depth channel letters

- Lumens per module - 14,5 lm
- Power per module - 0,3 W
- Extremely small only 7 mm wide and 29 mm long

- Optimal depths 40 - 75 mm
- 3 Years Warranty based on 12h/day

Carrefour

Depth: 40 mm
LED (Snow Mini S12): 124 pcs
Power (BP-V12-600) - 1 pcs
Best for small depth channel letters and light box illumination

- Lumens per module – 43 - 45 lm
- Power per module - 0,5 W
- Constant current controllers
- High Efficiency 86 - 90 Lm/W
- Special optics design for small depths - 160°
- One hole installation – 40% time saving
- Operating lifetime – 25 000 h
- Application depth starts only from 30 mm
- 3 Years Warranty based on 12h/day

Depth: 70 mm
LED (Crown OPTO S13): 337 pcs
Power (BP-V12-1000) - 2 pcs
Best for middle depth channel letters and light box illumination

- Lumens per module – 85-90 lm
- Power per module - 1,0 W
- Constant current controllers
- High Efficiency 85 - 90 Lm/W
- Special optics design for small depths - 160°
- One hole installation – 40% time saving
- Operating lifetime – 25 000 h
- Application depth best for 90-150 mm
- 3 Years Warranty based on 12h/day

Depth: 70 mm
LED (Crown OPTO S23): 156 pcs
Power (BP-V12-600) - 1 pcs
(BP-V12-1000) - 1 pcs
Constant current output switching power supplies

Features:

- fully encapsulated with IP67 level (Note. 8)
- 5 years warranty based on 12h/day

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>model</th>
<th>BP-C350-170</th>
<th>BP-C700-340</th>
</tr>
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<tbody>
<tr>
<td>OUTPUT</td>
<td>constant current range voltage range rated power</td>
<td>350 mA 6–48 V 16.8 W</td>
<td>700 mA 9–48 V 36 W</td>
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<tr>
<td>INPUT</td>
<td>voltage range frequency range efficiency (typ.)</td>
<td>180–264 VAC 47–63 Hz 80%</td>
<td>90–264 VAC 47–63 Hz 80%</td>
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<tr>
<td>PROTECTION</td>
<td>over current over voltage over temperature</td>
<td>+ + +</td>
<td>+ + +</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>working temperature</td>
<td>-30–70°C</td>
<td>-30–70°C</td>
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<tr>
<td>SAFETY &amp; EMC</td>
<td>safety standards</td>
<td>EN60950-1</td>
<td>EN60950-1</td>
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<td></td>
<td>EMC emission</td>
<td>EN65022, EN61000-3-2, EN61000-3-3, EN61000-4-2,4,5,6,8,11</td>
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<td></td>
<td>EMC immunity</td>
<td>EN65024</td>
<td>EN65024</td>
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<tr>
<td>OTHERS</td>
<td>dimension (mm) weight (kg)</td>
<td>140<em>30</em>220(W*H)</td>
<td>0.175</td>
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</table>

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<thead>
<tr>
<th>PROTECT</th>
<th>model</th>
<th>BP-V12-180</th>
<th>BP-V12-360</th>
<th>BP-V12-600</th>
<th>BP-V12-1000</th>
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</thead>
<tbody>
<tr>
<td>OUTPUT</td>
<td>constant current range voltage range rated power</td>
<td>12 Vdc 0-1.5 A 18 W</td>
<td>12 Vdc 0-6,0 A 36 W</td>
<td>12 Vdc 0-6,0 A 60 W</td>
<td>12 Vdc 0-8,5 A 102 W</td>
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<tr>
<td>PROTECTION</td>
<td>over current over voltage over temperature</td>
<td>+ + +</td>
<td>+ + +</td>
<td>+ + +</td>
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<td>-30–70°C</td>
<td>-25–70°C</td>
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<td>SAFETY &amp; EMC</td>
<td>safety standards</td>
<td>EN60950-1, EN61347-1, EN61000-3-3, EN65022, EN61000-3-2, EN61000-3-3, EN61000-4-2,4,5,6,8,11, EN65024</td>
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</tr>
<tr>
<td>OTHERS</td>
<td>dimension (mm) weight (kg)</td>
<td>140<em>30</em>220(W*H)</td>
<td>0.175</td>
<td>148<em>34</em>300(W*H)</td>
<td>0.34</td>
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## Accessories

Wires connectors suitable for Baltled products

<table>
<thead>
<tr>
<th>CONNECTOR IMAGE</th>
<th>CONNECTOR CODE</th>
<th>SUITABLE CABLE DIAMETER</th>
<th>AWG CABLE CROSS-SECTION</th>
<th>OPERATING TEMPERATURE</th>
<th>IP CLASS</th>
<th>SPECIAL PROPERTIES</th>
<th>CONNECTORS IN BAG</th>
<th>BALTLLED RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BL-WC-UY2</td>
<td>2,08 mm</td>
<td>AWG 26-19 (0,14-0,65 mm²)</td>
<td>-30-120°C</td>
<td>IP - 54</td>
<td>fully synthetic dimethyl silicone fluid</td>
<td>100 pcs</td>
<td>can be used to connect LED modules</td>
</tr>
<tr>
<td></td>
<td>BL-WC-UR2</td>
<td>2,08 mm</td>
<td>AWG 26-19 (0,14-0,65 mm²)</td>
<td>-30-120°C</td>
<td>IP - 54</td>
<td>fully synthetic dimethyl silicone fluid</td>
<td>250 pcs</td>
<td>can be used for cross connections because of three holes</td>
</tr>
<tr>
<td></td>
<td>BL-WC-U18</td>
<td>3,18 mm</td>
<td>AWG 19-16 (0,65-1,31 mm²)</td>
<td>-30-120°C</td>
<td>IP - 54</td>
<td>fully synthetic dimethyl silicone fluid</td>
<td>100 pcs</td>
<td>can be used to connect power supply and LED modules</td>
</tr>
</tbody>
</table>

*we are recommending to use this BC Tool with our connectors*
We see each customer as a partner, therefore we appreciate your time and listen to your needs carefully. With the intention to offer you the best solutions available. We develop bespoke LED products based on your specific contract and project requirements. We offer a broad portfolio of products featuring high quality components, reliable technical support and after sales service with competitive prices. These are the features, advantages and benefits of working with Balt LED Lighting Solutions. We have been developing our business successfully for over 10 years and will continue in this direction.