

LUMAWISE ENDURANCE POWER BRIDGE

POWERING SMART CITIES WITH REMOTE-MOUNTED SOLUTIONS

Designed to bridge the connectivity between remotely mounted sensors or control devices and a luminaire, TE Connectivity (TE)'s LUMAWISE Endurance Power bridge assembly has been developed for the retrofit market. It helps enable the integration of smart city control capabilities to existing DALI streetlights. The LUMAWISE Endurance Power bridge has the same form factor as TE's successful LUMAWISE Endurance bridge but now includes an onboard 24V auxiliary and DALI bus power supplies. Capable of delivering up to 6.5W on the auxiliary rail and 90mA on the DALI bus* - going above the requirements defined in the Zhaga-D4i ecosystem.

The LUMAWISE Endurance Power bridge provides an aesthetic solution to remotely mount and power up to two control devices. Converting an existing lighting network into a smart city platform ready for Zhaga-D4i control devices and sensors.

ELECTRICAL

- Input Voltage: 100V-305V AC
- Connection: 4 core 6m cable: Live, Neutral, DA+, DA-

MECHANICAL

- Height: 80mm, length 135mm

MATERIALS

- Bracket: PBT
- Receptacle: Housing PBT, Gasket LSR

STANDARDS

- EN 61347-2-11
- EN 60529
- EN 55015
- EN 61547
- UL UV-f1 rated for outdoor use
- EN 62386-101
- EN 62386-150
- DALI Part 151 and 152

SPECIFICATIONS

- Product Specification: 108-162432
- Application Specification: 114-161871

BENEFITS

- Onboard auxiliary and DALI bus power supplies help allow for a standard luminaire to be retrofitted and converted to a Zhaga-D4i enabled platform, ready for communication nodes and sensors
- A small aesthetic form factor means discreet deployment of DC power supplies, having minimal impact on a neighborhood
- With power supplies delivering higher power output (+66%) than the minimum requirements of Zhaga-D4i, you can select from a larger range of connected control devices and sensors
- Pole and wall mount options not only support DALI luminaires to be retrofitted, but control devices can now be deployed where lighting control isn't needed
- Control devices protected with surge protection on the mains input as well as the DALI bus and auxiliary rail

APPLICATIONS



Street and Area Lighting



Smart Cities



Heritage and Decorative Luminaires



Retrofit Existing Deployed Streetlights

USER CASES



Upgraded DALI Network



Standalone Power Tap



Zhaga-D4i Enhanced Requirements

*Capable of delivering up to 6.5W on the auxiliary rail with no load on the DALI bus, and 90mA on the DALI bus with a maximum 3.5W load on the auxiliary rail. See derating curve for more information.

KEY FEATURES

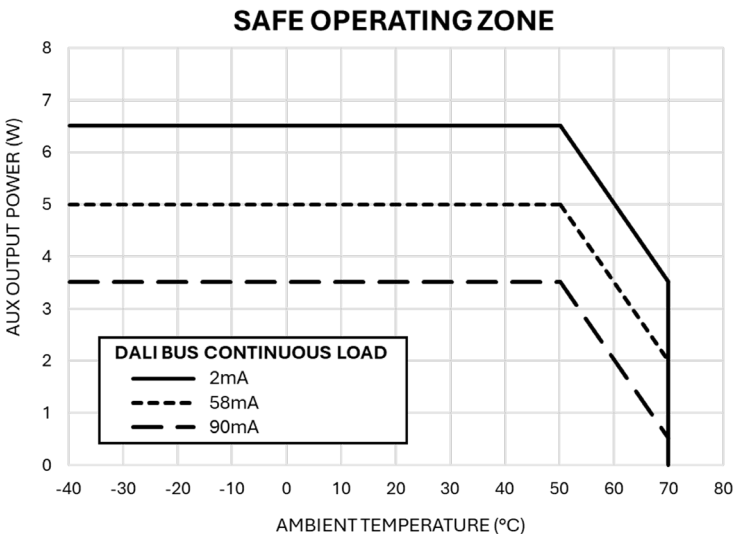
- One to two Zhaga interfaces, upwards/downwards or downwards facing options
- Auxiliary output:
  - 24V DC ±10%
  - 6.5W max, see derating curves
  - 7.5W peak, 2.2ms repetitive pulses
- DALI Bus Power Supply output:
  - 58mA guaranteed over –40°C to 70°C temperature range
  - 90mA max, see derating curves**
- Mains input Surge protection: 6kV, 3kA
  - ANSI C136.10, Typical, Long Life
- DALI bus and auxiliary surge protection:
  - 1200V surge, both polarities
  - 56V maximum clamping voltage
- Parallel connection with other DALI bus power supplies is permissible
- Pole and wall mounted options
- Designed to fit poles with Ø50mm to Ø100mm and Ø100mm to Ø200mm
- Tapered pole compatible
- Suitable for pole section thickness of 2.5mm to 6mm
- Screwed directly to the pole or strap fixable
- Drip ring prevents downwards facing device from collecting water
- IP66 and IK09
- Operating temperature range –40°C to 70°C

PART NUMBERS

Item	Part Number	Number of Receptacles	Wall or Pole Mount	Cable Routing	Cable Length
1	1-2539228-1	Upper and Lower Receptacle	Pole 50mm - 100mm	Pole Interior	6m
2	2-2539228-1	Upper and Lower Receptacle	Pole 50mm - 100mm	Pole Exterior	6m
3	3-2539228-1	Upper and Lower Receptacle	Pole 100mm - 200mm	Pole Interior	6m
4	4-2539228-1	Upper and Lower Receptacle	Pole 100mm - 200mm	Pole Exterior	6m
5	5-2539228-1	Upper and Lower Receptacle	Wall	Pole Exterior	6m
6	9-2539228-7	Upper and Lower Receptacle	Pole 50mm - 100mm Pole 100mm - 200mm Wall	Pole Interior	6m
7	9-2539228-8	Lower Receptacle Only	Pole 50mm - 100mm Pole 100mm - 200mm Wall	Pole Interior	6m

All part numbers are kits, including mounting adaptor plates listed in the column labelled 'wall or pole mounted', and mounting hardware.

POWER DERATING CURVES

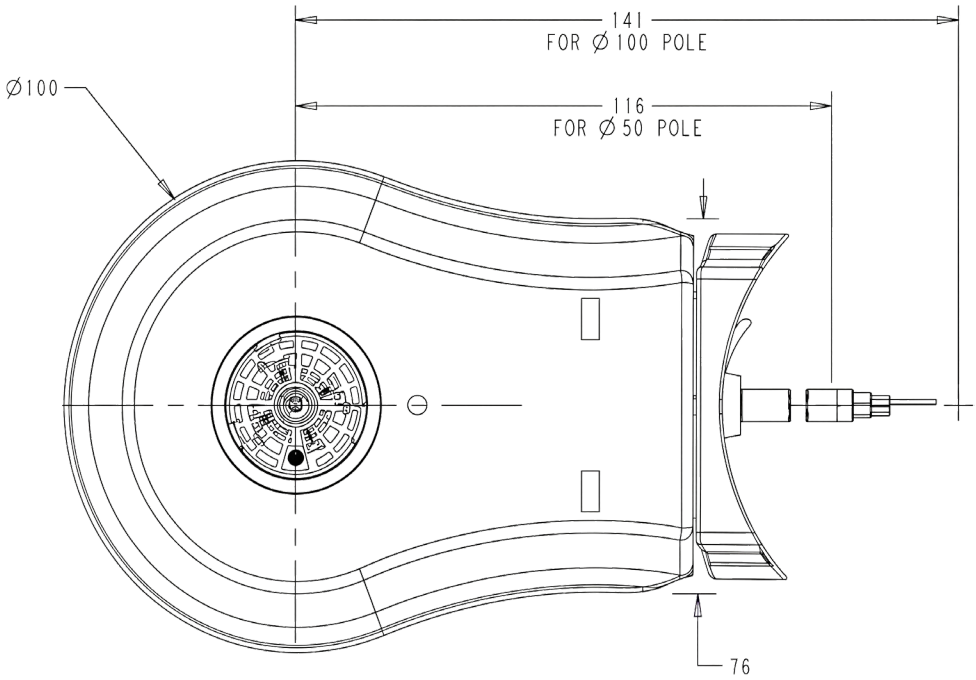


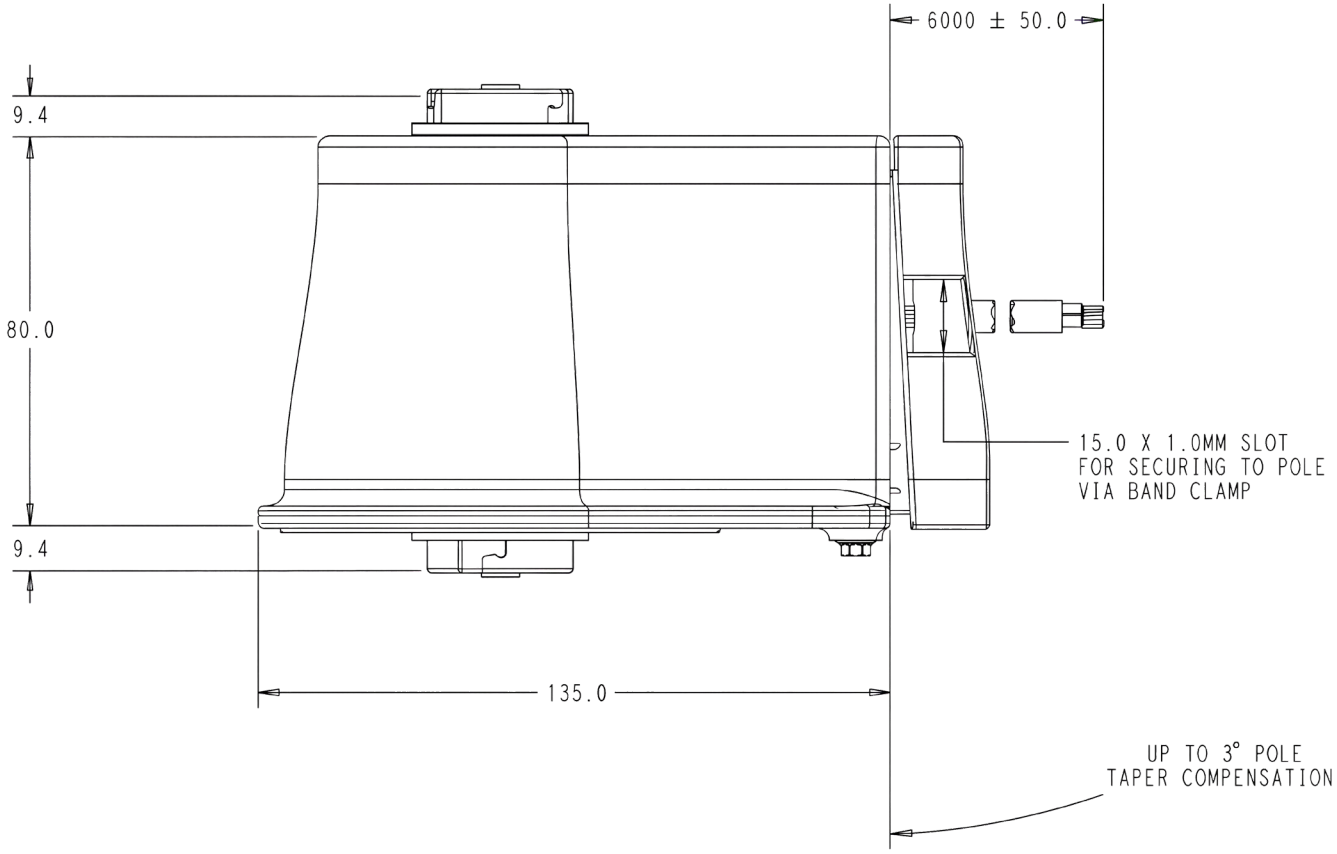
Note: 58mA is the DALI Alliance's "D4i Certification and Trademark" requirement.

**99mA 'Maximum Supply Current' as defined and required by DALI Part 101 (IEC 62386-101)

PRODUCT DIMENSIONS

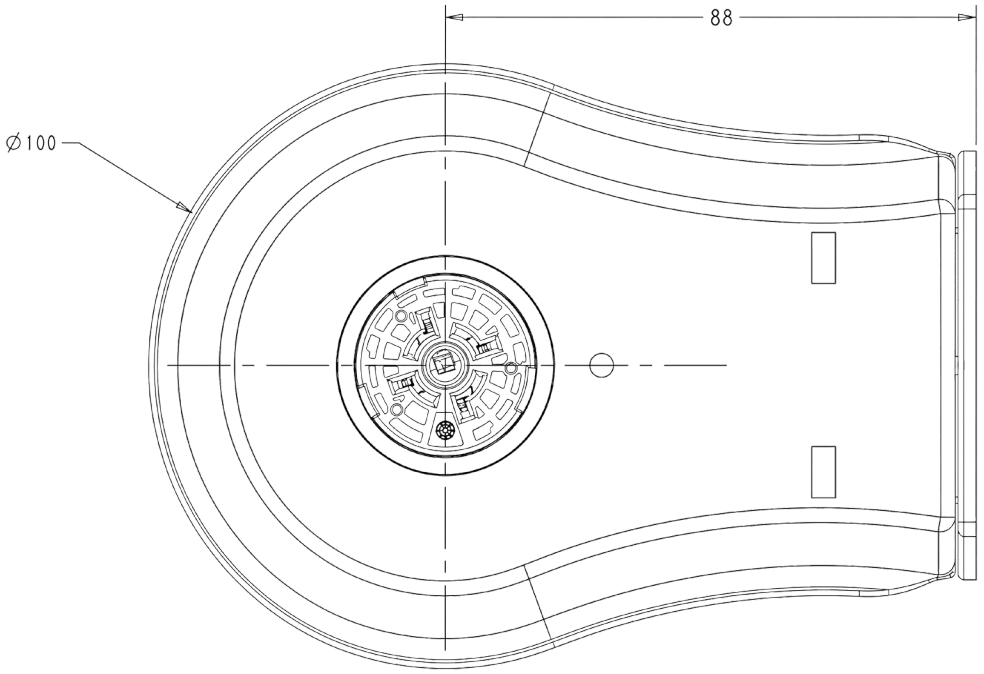
Pole Mount

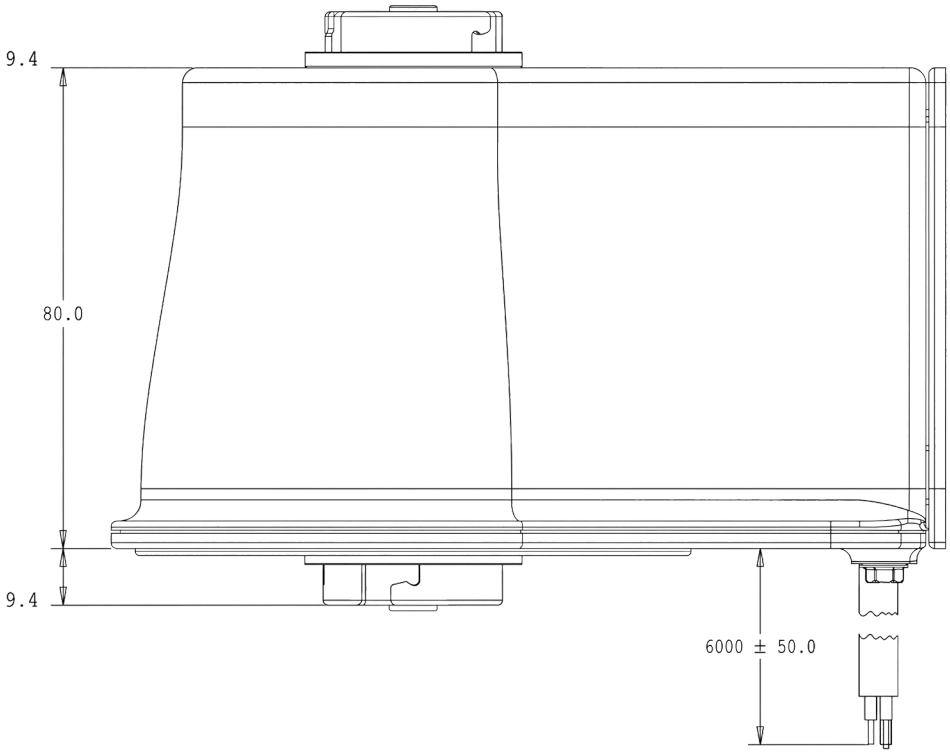




Dimensions in mm. (Check customer drawing for details)

Wall Mount





Dimensions in mm. (Check customer drawing for details)

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