

## Product Brief – CHR.PSU Handrail Power Supply Units

Chromatica LED handrail rail luminaires operate at a low DC voltage to ensure safe operation and installation on public access structures.

Power supply units are manufactured using metal clad enclosures for indoor use or placement within an electrical feeder pillar, or GRP enclosures for external use.

GRP enclosures have no external vents to ensure IP65 sealing.

Metal clad power supply unit mounted within electrical feeder pillar.



- Body & door constructed from 15/10 or 12/10 sheet steel dependant on cabinet size.
- Gear mounting plate made from sendzimir steel with a thickness of 20/10 to 25/10 dependant on cabinet size.
- Large cable gland entry plate at base secured with TX25 torx screws.
- IP66 (without ventilation grills)
- IK10 (without ventilation grills)
- Side and door vents to allow convection cooling of internal transformers.
- Epoxy polyester powder coat finish RAL7035

Typical metal clad enclosure dimensions.

CHR.PSU.342	300mm wide x 400mm x high x 200mm deep
CHR.PSU.442	400mm wide x 400mm x high x 200mm deep
CHR.PSU.552	500mm wide x 500mm x high x 200mm deep
CHR.PSU.572	500mm wide x 700mm x high x 200mm deep
CHR.PSU.682	600mm wide x 800mm x high x 200mm deep



Polyester enclosures are an ideal choice for use outdoors. Manufactured from UV stable composite materials, enclosures will not corrode, enhancing product life.

To provide suitable weather protection, external enclosures are not fitted with ventilation grills. This limits the quantity and size of transformers used within the enclosure, to ensure the transformer thermal parameters are not exceeded. It may be necessary to use more than one enclosure.

- Fibreglass reinforced polyester body & door assembly.
- Self-extinguishing and halogen free.
- Double insulated, according to EN61439-1.
   Rated insulation voltage Ui=1000V.
- 2.0mm galvanised steel gear mounting plate.
- There is no cable gland entry plate on the base of the enclosure.
- IP66
- IK08
- No side or door vents fitted.
- Raw material self-colour RAL7035
- 25 °C to 70 °C in continuous use (peak temperatures up to 130 °C).

## Typical polyester enclosure dimensions.

CHR.PSUP.315.415.170	315mm wide x 415mm x high x 170mm deep
CHR.PSUP.415.515.230	415mm wide x 515mm x high x 230mm deep
CHR.PSUP.415.615.230	415mm wide x 615mm x high x 230mm deep
CHR.PSUP.535.735.270	535mm wide x 735mm x high x 270mm deep
CHR.PSUP.635.835.300	635mm wide x 835mm x high x 300mm deep

Chromatica PSU's are manufactured using XP Power 24V DC din rail mounted power supply units.

Excellent build quality, reliability and a long MBTF, make these units the ideal choice when using LED luminaires.

Power supply output voltages may be adjusted up to 28V DC to help mitigate the effects of DC volt drop on long luminaire runs.

The power supply units will automatically reduce power output should ambient temperatures within the enclosure increase above prescribed values. Power supply units also provide short circuit protection to the luminaire power supply harnesses within the handrail or luminaire containment system.



Output Power	Output Current (230V)	Typ. Efficiency (Full Load)	Power Factor	Input Current (230V)	Inrush Current (230V)
75W	3.2A	91%	0.95	0.4A	60A
120W	5.0A	91%	0.95	0.6A	65A
240W	10.0A	94%	0.95	1.13A	40A

Typical feeder pillar installation.



To provide suitable weather protection, metal clad enclosures fitted with ventilation louvres should be installed within an electrical feeder pillar or electrical riser room.

This is the most common form of installation.

We would recommend fitment of the following within the electrical feeder pillar:

- Feeder pillar emergency bulkhead light.
- Lighting control system and manual override switch for operation during daylight hours.
- Suitable electrical distribution and isolation equipment.
- Frost tube heater and thermostat
- Supplementary 13A 3pin socket.