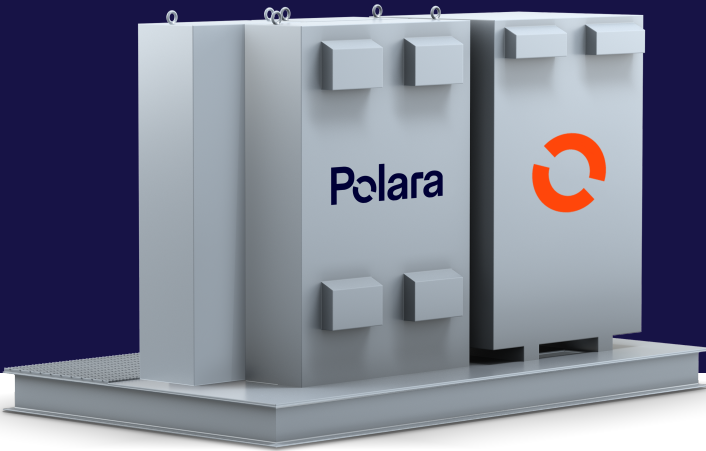


CHRGPK

Elevate your EV Fleet with cutting edge power distribution



OUR 4 KEY ADVANTAGES



Reduced installation time and cost

Achieve significant savings with our efficient installation process.



High power density / low footprint

Maximize your space with our compact yet powerful design.



Modular and scalable

Easily expand and modify your system to meet evolving demands.



Superior electrical application efficiency

Enhance performance with our advanced electrical solutions.

HERE'S HOW WE CUT DOWN ON INSTALLATION TIME AND COSTS

Same day foundation and equipment installation

Swift setup gets you up and running quickly.

Single lift installation of distribution equipment

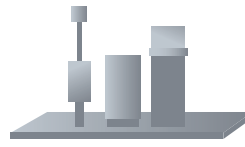
Simplify installation with minimal lifting requirements.

Elimination of site grading

Save time and resources by bypassing extensive site preparation.

No concrete work for distribution equipment

Further reduce installation complexity and costs.



Utility service connection
Distribution Switchboard
Transformer
IoT Connection
Foundations
Equipment interconnection
Field cabling fittings
Trenching
Equipment
Feeder breakers
Expansion/Accessibility
Electrical Application Efficiency
Harmonics
Footprint (sqft)

CHRGPK
Included
Included
Included
Included
4 x screw piles or 4 x 10" concrete sonotubes
Armoured cable (Teck90/ACWU/AIA)
Included (Roxtec)
~350 ft3, minimal backfill
15000 lb crane, single lift
Pre-installed
Bottom entry as required
95%
K9
114.5

Traditional Outdoor
Included
Included
Included
External, pad and mounting structure required
6' x 15' concrete switchboard pad 6' x 6' concrete transformer pad
wire/cable & conduit
Not included
~550 ft3
10,000 lb crane, dual or triple lift
Field installed or pre-installed
Pre-run conduits
75%-85%
K0
156

Sea-can
Included
Included
Included
Included
42'x 10' gravel or concrete pad
Prewired
Not included
N/A
20,000 lb crane, single lift
Pre-installed
Side entry as required
70%-80%
K0
320

Electrical efficiency is reported by summing the losses of each component. This is expressed as :

$$\frac{\text{Utility power supplied} - \text{Transmission losses} - \text{AC/DC conversion losses}}{\text{Utility power supplied}} \times 100\%$$

For electric vehicles, application efficiency is a superior metric. It measures the percentage of utility-supplied power converted into stored energy in vehicle batteries, represented as :

$$\frac{\text{Utility power supplied} - \text{HVAC} - \text{Lighting} - \text{Automation \& control} - \text{Transmission losses} - \text{AC/DC conversion losses}}{\text{Utility power supplied}} \times 100\%$$

MINIMIZING TRANSMISSION AND CONVERSION LOSSES

Polara CHRGPK is engineered to minimize transmission and AC/DC conversion losses through:

- Use of harmonic rated equipment
- Sizing transformers to operated within their peak efficiency band.
- Reducing the number of transformers to minimize standby losses
- Controlling chargers to operate at peak efficiency without sacrificing vehicle availability
- Elimination of HVAC and lighting loads
- Phase balancing for AC charging and single phase loads
- Appropriately sizing cables to minimize line losses