



Product Specifications

PKM150



CHARGING STATION

Product Specifications



Product Highlights

Output Power:50kW|100kW|150kW

3rd Party UL & CE Certified

Simultaneous Charging of Two Vehicles

Charging Cable Types: CCS:200A/350A|NACS:200/350A

Charging Cable Lengths:
3.6m (11ft 9in)
6m (19ft 8in) with cable management

10" LCD Screen with customisable HMI

Card Reader Options (Charger Integrated):
Credit Card Reader with RFID Support
RFID Reader
No Reader

DC Meter Option

Charging State Indicator Lights Option

Customer Branded Vinyls Option

Remote Management: Remote access, configuration, diagnostics, software update

Single Person Left Field Replaceable Modules

Environmental

Enclosure Construction: Aluminium double skin

Impact Protection Rating: IK10

Ingress Protection Rating: IP65, NEMA Type 3R

Maximum Operating Altitude: 3000m (9842ft)

Operating Temperature: -35°C to +50°C (-31°F to +122°F) with derating

Storage Temperature: -35°C to +70°C (-31°F to +158°F)

Acoustic Noise: Maximum 65dB (variable under load)

Physical

Height	1998mm (78.6")
Width	783mm (30.8")
Depth	309mm (12.1")
Weight	Up to 335kg

System Characteristics

Supply Input: 950V DC (DC microgrid)

Maximum Output Power:
Single Vehicle Charging: 150 kW | 100 kW | 50 kW
Simultaneous Charging: 2 x 75kW | 2 x 50kW | 2 x 25kW

Output Voltage: CCS: 150-920V DC

Output Current:
Single Vehicle Charging: up to 350A
Simultaneous Charging: up to 400A (2 x 200A)

Efficiency: >97%

Electrical protection: Over current, over voltage, under voltage, short circuit, surge protection

Event Sensors: Tilt and door ingress

Authentication Methods:
RFID: MI-FARE ISO/IEC 14443A/B | ISO/IEC 15693 | ISO/IEC 18000-3 | FeliCa | NFC
Credit Card: Credit card terminals – various models
Remote start: mobile application
Vehicle: ISO15118 Plug and Charge | Autocharge
Free mode: no authentication

Communication Protocols:
EVSE to EV: ISO 15118-2, DIN 70121 | ISO 15118-20 ready
EVSE to CSMS: OCPP 1.6J | 2.0.1 ready

Network Connection: Ethernet | Cellular 4G/LTE (optional)

Accessibility: Meets American with Disabilities Act (ADA) and EN 301 549 Accessibility Height Requirements



RECTIFICATION UNIT

Product Specifications



System Characteristics

DC Microgrid Power Supply:

Power up to 4 x 150kW PKM charging stations

Output Power:

WORLDWIDE (400VAC): Up to 300kW total

USA (480VAC): Up to 360kW total

Grid Frequency:

WORLDWIDE (400VAC): 50Hz +/- 10%

USA (480VAC): 60Hz +/- 10%

Input Voltage:

WORLDWIDE (400VAC): 400VAC 3ph +/-10%. Derating applied on low line level and phase imbalance

USA (480VAC): 480VAC 3ph +/-10%. Derating applied on low line level and phase imbalance

Nominal Current at Nominal Voltage Level:

WORLDWIDE (400VAC): 450A

USA (480VAC): 450A

Maximum Current at Low Line Level:

480A at Nominal Voltage -10% and Power Factor >0.99

Input Overvoltage Category: Category III

Efficiency:

WORLDWIDE (400VAC): > 97.6%

USA (480VAC): > 98.1%

Surge Protection:

WORLDWIDE (400VAC): EN 61643-11 Type 2 SPD with In = 20kA 8/20us, SCCR = 150kA, including backup fuse

USA (480VAC): UL listed Type 1 SPD In = 20kA, SCCR = 200kA, including backup fuse

Output Voltage: 950V DC

No. of DC Outputs: 2 | 4

Isolation Between AC Mains and Charging Station: Not isolated

Power Factor (Charging): >0.99

Total Harmonic Distortion (Thd): <5%

Short Circuit Current Rating: 18kA

Communication Protocol: OCPP v1.6J | OCPP 2.0.1 ready

Network Connection: Cellular 4G/LTE | Ethernet

System Communication: Ethernet to charging stations

Power Supply: Battery-backed Uninterrupted Power Supply (UPS) functionality for telemetry during power outage

Site Distribution Board:

Over Current Protection Device (OCPD): Required

Under-voltage Relay or Shunt Trip Relay: Required

Residual Current Monitoring: Optional



Environmental

- Maximum Operating Altitude:** 2000m (6562ft)
- Operating Temperature:** 35°C to +50°C (-31°F to +122°F) (with derating), 5-95% Relative Humidity (RH) non-condensing
- Storage Temperature:** -40°C to +65°C (-40°F to +149°F), 5-95% Relative Humidity (RH) non-condensing
- Impact Protection Rating:** IK10
- Ingress Protection Rating:** IP54, NEMA Type 3R

Physical

- Height** 2360mm (92.9")
- Width** 535mm (21.0")
- Depth** 1028mm (40.4")
- Weight** 510kg (1125lbs) for base rectifier unit + 15kg (33lbs) for cable interface + 15kg (33lbs) per DC port
- Shipping Weight** 510kg (1125lbs) for base rectifier unit + 15kg (33lbs) for cable interface module + 15kg (33lbs) per DC port (2 or 4) + 90kg (199lbs) for crate

CHARGING STATION COMPLIANCE

Standards

Europe: CE	IEC 61851-1, IEC 61851-23, IEC 62311, IEC 61851-21-2, ETSI EN 303 446-1, ETSI EN 301 489-1, ETSI EN 301 489-3, ETSI EN 301 489-52
North America: UL / CSA	USA: UL 2202, 47 CFR § 1.130, FCC 47 CFR Part 15 B, FCC certified GSM (4G) Canada: CSA C22.2, RSS-210 and SPR-002, ICES-003, ISED certified GSM (4G)

Environmental

GlobalRoHS | WEEE

Cyber security

Global
EUISO 27001
EU Cyber Resilience Act

Legal Metrology

Europe	MID	USA National	NTEP †
France	LNE	California	CTEP

† Pending Certification Completion

RECTIFICATION UNIT COMPLIANCE

Standards

Europe: CE	IEC 61851-1, IEC 61851-23, IEC 62311, IEC 61851-21-2, ETSI EN 303 446-1, ETSI EN 301 489-1, ETSI EN 301 489-3, ETSI EN 301 489-52 VDE-AR-N 4110 (50Hz & 60Hz), IEEE-519 (50Hz & 60Hz)
North America: UL / CSA	USA: UL 2202, 47 CFR § 1.130, FCC 47 CFR Part 15 B, FCC certified GSM (4G) Canada: CSA C22.2, RSS-210 and SPR-002, ICES-003, ISED certified GSM (4G)

Environmental

GlobalRoHS | WEEE

Cyber security

Global
EUISO 27001
EU Cyber Resilience Act



TRITIUM™

AMERICAS • APAC • EUROPE • UK

tritiumcharging.com



Designed in Australia



Manufactured in U.S.A