



Next Generation DC Fast Charger

- + Slim, compact, stylish
- + Modular design
- + Available in 50kW & 75kW
- + Liquid cooled & IP65 rated
- + 3rd party certified
- + Latest safety standards
- + Durable, low maintenance
- + Increased reliability
- + Brandable exterior
- + Whisper quiet operation mode
- + Eichrecht DE-M DC Meter Compatible

RTM 50kW/75kW Specifications

INNOVATING YOUR FUTURE



EDITIONS AVAILABLE

FEATURE	GOOD	BETTER	BEST
50kW VARIANT	✓	✓	✓
75kW VARIANT	✓	✓	✓
3RD PARTY UL CERTIFIED	✓	✓	✓
3RD PARTY CE CERTIFIED	✓	✓	✓
FIELD REPLACEABLE UNITS (FRU) SINGLE PERSON LIFT MODULES	✓	✓	✓
RFID READER	✓	✓	INCLUDED IN CCR
DIGITAL LCD SCREEN	✓	✓	✓
CABLE LENGTH	3m (9ft 10")	6m (19ft 8")	6m (19ft 8")
CABLE MANAGEMENT		✓	✓
"PAY AS YOU GROW" UPGRADEABLE		✓ 50kW → 75kW	✓ 50kW → 75kW
CHARGE STATE INDICATOR LIGHTS			✓
SENSOR PACKAGE (TILT, DOOR INGRESS)	OPTIONAL - TRIPS MCB	✓ TRIPS MCB	✓ TRIPS CONTACTOR
SIMULTANEOUS CHARGING (A & B)	OPTIONAL	✓	✓
CREDIT CARD READER WITH RFID SUPPORT (CHARGER INTEGRATED)	OPTIONAL	OPTIONAL	✓
CUSTOMER BRANDED VINYLs	OPTIONAL	OPTIONAL	✓
[DE-M] DC METER (EICHRECHT)	OPTIONAL [*]	OPTIONAL [*]	OPTIONAL [*]
EMC EMISSIONS CERTIFICATION	CLASS A / CLASS B [†]	CLASS A / CLASS B [†]	CLASS A / CLASS B [†]
CONNECTIONS TYPE (SHORT CIRCUIT CURRENT RATING)	MINIATURE CIRCUIT BREAKER 37.5kA	MINIATURE CIRCUIT BREAKER 37.5kA	FUSE DISCONNECT 100kA
STANDARD WARRANTY	2 YEARS	2 YEARS	2 YEARS
WARRANTY EXTENSIONS AVAILABLE	+1YR / +2 YR / +3 YR	+1YR / +2 YR / +3 YR	+1YR / +2 YR / +3 YR

* Pending certification completion

† Class B coming in 2022



COMMON SPECIFICATIONS

SUPPLY INPUT	3Ø AC see overleaf for regional details
OUTPUT VOLTAGE	CCS: 150-920V DC CHADEMO: 50-500V DC
IP RATING	IP65 (NEMA 3R)
IK RATING	IK10 (Including HMI)
EFFICIENCY	95%
POWER FACTOR	>0.99
TOTAL HARMONIC DISTORTION	<5%
MAXIMUM OPERATING ALTITUDE	GOOD: 2000m (6561ft) BETTER, BEST: 3000m (9842ft)
ACOUSTIC NOISE	Variable under load: < 65dB @ 1m max.
OPERATING TEMPERATURE	50kW: -35°C to +50°C (-31°F to +122°F) full power with no de-rating 75kW: -35°C to +50°C (-31°F to +122°F) de-rating applies above +40°C
STORAGE TEMPERATURE	-35°C to +70°C (-31°F to +158°F)
COMMUNICATION PROTOCOL	OCPP v1.6J
NETWORK CONNECTION	3G/4G/Ethernet for network
AUTHENTICATION METHOD	RFID: MI-FARE ISO/IEC14443A/B, ISO/IEC15693, ISO/IEC18000-3, FeliCa, NFC
CREDIT CARD READER	Optional contactless or 3-in-1 (if available, region dependent), field upgradeable
ELECTRICAL PROTECTION	GOOD: Over current, Over voltage, Under voltage, Short circuit. BETTER, BEST: Over current, Over voltage, Under voltage, Short circuit, Surge protection, Protective earth continuity monitor.
ENCLOSURE CONSTRUCTION	Aluminium double skin
DIMENSIONS	1998 x 850 x 309 mm (79" x 34" x 12")
WEIGHT	Up to 294kg with cable management (649lbs)
SHIPPING WEIGHT	Up to 380kg depending on configuration (822lbs)
ACCESSIBILITY	Height requirements: US ADA, EN 301 549, and DIN 18040
SAFETY COMPLIANCE*	WORLDWIDE: CE USA, CANADA: cTUVus, NRTL Certified to UL 2202 AND CSA C22.2 No. 107.1

*Pending certification completion

AC GRID INTERFACE

ITEM	WORLDWIDE: (400VAC / 415VAC)		USA: (480VAC)	
	50kW	75kW	50kW	75kW
POWER LEVEL				
VOLTAGE	400VAC 3ph (no neutral) +/-10%		480VAC 3ph (no neutral) +/-10%	
FREQUENCY	50Hz +/- 10%		60Hz +/- 10%	
NOMINAL CURRENT AT NOMINAL VOLTAGE LEVEL	76A	114A	63A	95A
MAXIMUM CURRENT AT LOW LINE LEVEL (NOMINAL VOLTAGE - 10%) AND PF>0.99	84A	114A	70A	105A
OVER CURRENT PROTECTION DEVICE REQUIRED (OCPD) IN SITE DISTRIBUTION BOARD	100A breaker recommended (Required for supply cable protection)	125A breaker recommended	80A breaker recommended (Required for supply cable protection)	125A breaker recommended
FAULT CURRENT LIMITING FUSES IN SITE DISTRIBUTION BOARD	Current limiting fuses or a UL/CE certified current limiting circuit breaker MUST be installed if available fault current exceeds (by model): GOOD / BETTER: 37.5kA BEST: 100kA			
RESIDUAL CURRENT MONITORING IN SITE DISTRIBUTION BOARD (OPTIONAL)	If local regulation requires a residual current monitoring device, it must feature adjustable time delay and adjustable threshold.			
UNDER-VOLTAGE RELAY/SHUNT TRIP RELAY IN SITE DISTRIBUTION BOARD (OPTIONAL)	<p>The RTM range includes options for circuitry to locally isolate the charger's power circuit if the safety loop monitor connected the door switches, tilt sensor, leak sensor or protective earth continuity monitor is triggered.</p> <p>Additionally, the charger can also include options to allow upstream isolations in the event of a safety loop trigger event by including an under-voltage relay coil or shunt trip module on the feeder circuit breaker in the site distribution board.</p> <p>Tritium chargers should only be installed by a licensed contractor and a licensed electrician, in accordance with all local and national codes and standards. This may include additional, lockable disconnect mechanisms within line of sight of the supplied equipment.</p>			
REFERENCE CALCULATION OF BURIED CABLE SIZE FOR AC SUPPLY (LENGTH OF AC CABLES AND SYSTEM EFFICIENCY SHOULD BE CONSIDERED WHEN SIZING CABLES)	Single cores in buried duct:		Single cores in buried duct:	
	25mm ² Cu for L1,2,3	50mm ² Cu for L1,2,3	6AWG Cu for L1,2,3	3AWG Cu for L1,2,3
	16mm ² Cu for PE	25mm ² Cu for PE	8AWG Cu for PE	4AWG Cu for PE
	Multicore cable in buried duct:		Multicore cable in buried duct:	
	25mm ² Cu	50mm ² Cu	4AWG Cu	2AWG Cu
	Multicore cable direct buried:			
	25mm ² Cu	35mm ² Cu		
AC SUPPLY MAXIMUM CABLE SIZE	Cable sizes must be calculated on a per site basis as length, burial/conduit method, insulation rating, soil type will all affect correct sizing.			

CABLE SPECIFICATIONS

POWER	GOOD	BETTER/BEST
50kW Variant	Length: 3m (9ft 10") CHAdEMO 125A CCSI 150A / CCS2 150A	Length: 6m (19ft 8") with cable management CHAdEMO 125A CCSI 200A / CCS2 200A
75kW Variant	Length: 3m (9ft 10") CHAdEMO 125A CCSI 200A / CCS2 200A	Length: 6m (19ft 8") with cable management CHAdEMO 125A CCSI 200A / CCS2 200A

A U S T R A L I A • U S A • E U R O P E

tritiumcharging.com • enquiries@tritium.com.au

Worldwide: Murarrie, QLD, Australia

USA: Torrance, CA, United States

Europe: CA, Amsterdam, Netherlands