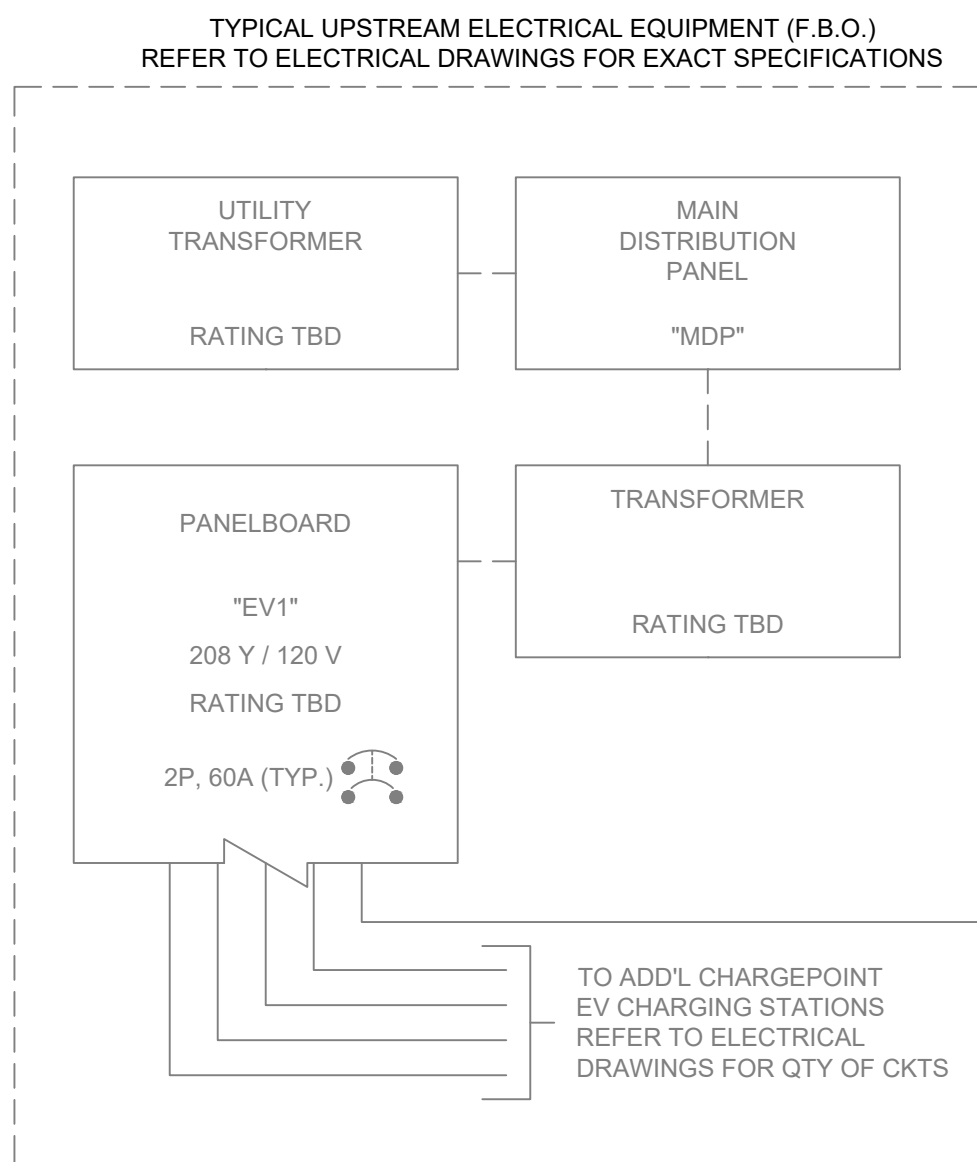


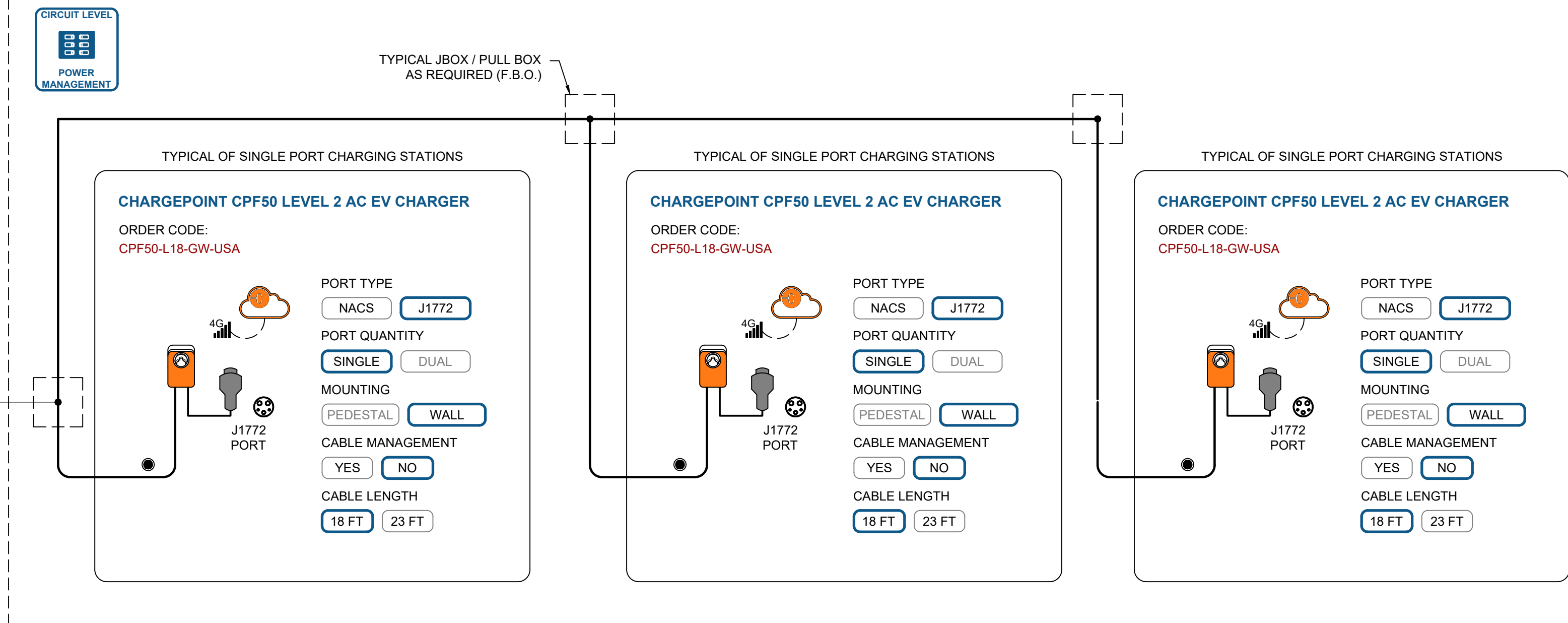


QUOTATION/PRICING REQUESTS:
CONTRACTORS TO CONTACT ELECTRICAL DISTRIBUTORS.

OTHER INQUIRIES:
CONTACT CHARGEPOINT DIRECTLY VIA EMAIL AT
SPECIFICATIONS@CHARGEPOINT.COM
OR VISIT CHARGEPOINT'S HOMEPAGE AT
[HTTPS://WWW.CHARGEPOINT.COM/#CHPT](https://www.chargepoint.com/#CHPT)



TYPICAL 60A SHARED CIRCUIT FOR LEVEL 2 AC ELECTRIC VEHICLE CHARGING STATIONS
AUTOMATIC LOAD MANAGEMENT SYSTEM REQUIRED PER NEC 625.42 - BASIS OF DESIGN: CHARGEPOINT POWER MANAGEMENT SOFTWARE



TYPICAL DAY: MULTIFAMILY PROPERTY 8 HOUR SESSIONS

ASSUMPTIONS

- ALL PORTS ARE OCCUPIED AND ACTIVELY CHARGING.
- STATIONS HAVE AN ACTIVE COMMUNITY OR ESSENTIAL CHARGEPOINT CLOUD PLAN.
- UTILIZE NOTIFY WHEN AVAILABLE FEATURE TO INFORM DRIVERS WHEN CHARGERS BECOME AVAILABLE.
- MINIMUM OUTPUT PER PORT NOT TO DROP BELOW 16A.
- (3) PORTS PER 60A CIRCUIT (48A CONTINUOUS LOAD).

SUMMARY

UP TO (3) CARS CAN RECEIVE ~80 MILES OF ADDED RANGE
EACH IN A TYPICAL DAY, PER 60A CIRCUIT.

ESTIMATED RANGE PER HOUR	10 MILES
DWELL TIME	8 HOURS
AVERAGE RANGE ADDED PER SESSION	80 MILES

ESTIMATED RANGE PER HOUR (RPH) SHARED CIRCUIT - CIRCUIT LEVEL POWER MANAGEMENT REQUIRED					
PANEL VOLTAGE: 208 Y / 120 V, 3P4W					
BRANCH CIRCUIT BREAKER: 2-POLE, 60 A					
PORTS IN USE	OUTPUT PER PORT A	OUTPUT PER PORT KW	RPH PER PORT (MILES)	MPDAY ₄	MPDAY ₈
1	48	9.98	30	120	240
2	24	4.99	15	60	120
3	16	3.33	10	40	80

MPDAY₄ = RANGE ADDED IN 4 HOURS
MPDAY₈ = RANGE ADDED IN 8 HOURS

NOTES

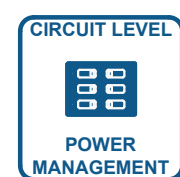
- ESTIMATED RPH BASED ON AVG. PASSENGER CAR EFFICIENCY (~3 MILES / KWH). ACTUAL RPH MAY VARY BASED ON VEHICLE MAKE AND MODEL.
- ADDITIONAL REDUCTIONS IN RPH MAY OCCUR DUE TO PANEL AND SITE-LEVEL POWER MANAGEMENT.
- MPDAY₄ AND MPDAY₈ ARE CALCULATED AS THE WORST CASE SCENARIO, ASSUMING ALL PORTS ARE CONNECTED AND ACTIVELY CHARGING.

CHARGEPOINT POWER MANAGEMENT

HIERARCHICAL POWER MANAGEMENT

- ENABLES OVERSUBSCRIPTION OF TRANSFORMERS, PANELS, AND / OR CIRCUITS.
- ELIMINATES NEED FOR EXTERNAL LOAD MANAGEMENT DEVICES IN UPSTREAM ELECTRICAL INFRASTRUCTURE.
- MEETS STANDARDS SET BY NEC 625.42 FOR LOAD MANAGEMENT

CAN INCLUDE ANY OR ALL OF THE FOLLOWING:

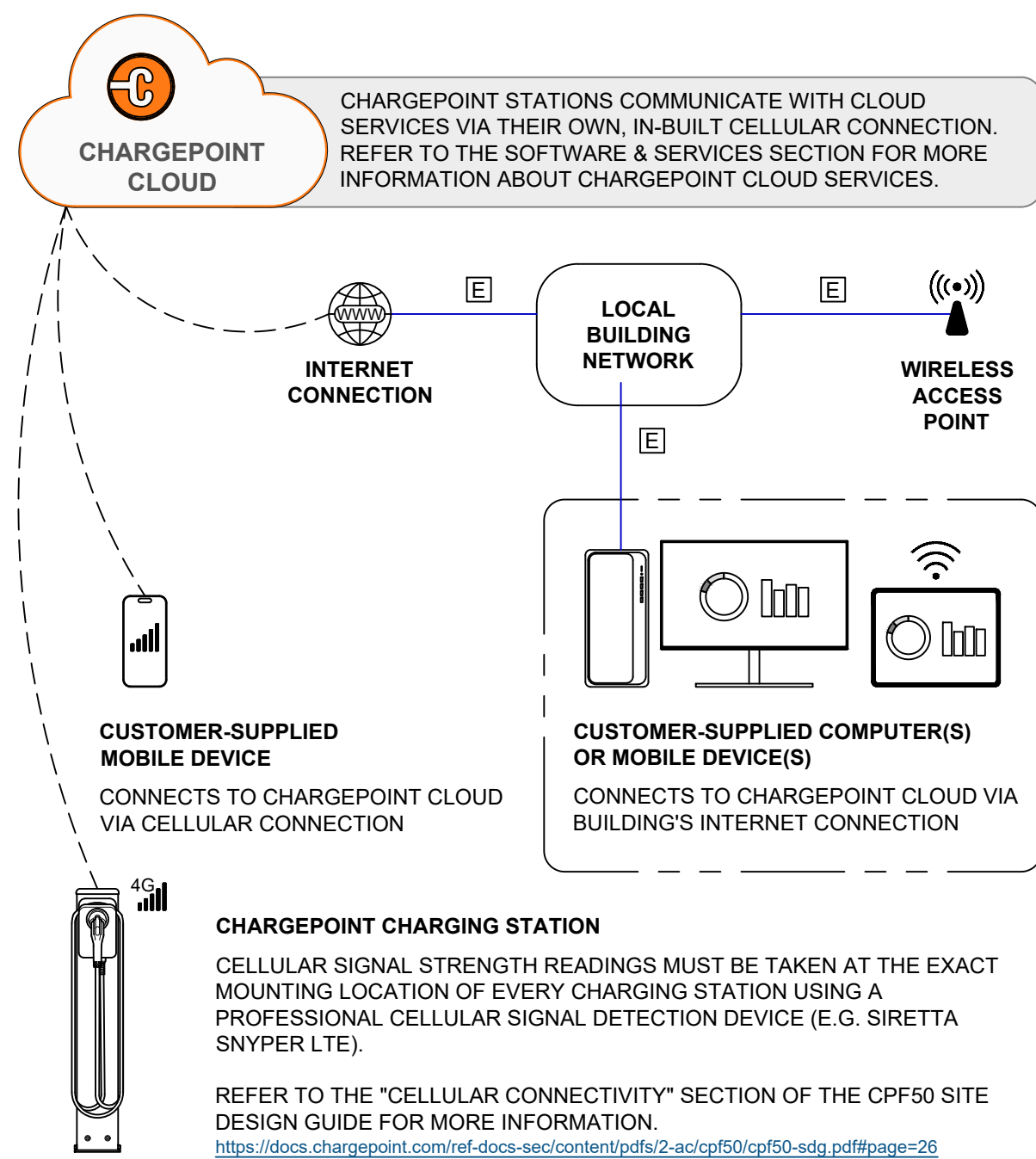


RECOMMENDED EQUIPMENT SIZES

RECOMMENDED SITE TRANSFORMER SIZING WITH SITE-LEVEL POWER MANAGEMENT		RECOMMENDED MAIN BREAKER SIZING WITH PANEL-LEVEL POWER MANAGEMENT			
TRANSFORMER RATING (kVA)		PANEL VOLTAGE: BRANCH CIRCUIT BREAKER (PER PORT):		208 Y / 120 V 2-POLE, 60A	
	MAX QTY OF PORTS	MCB RATING (A)	MAX QTY OF PORTS	MAX AMPS PER PORT	MIN AMPS PER PORT
30	9	125	10	48 A	16 A
45	13	200	17		
75	22	225	19		
112.5	33	400	34		
150	45	600	51		
225	67	800	68		
300	90				
500	150				
750	225				

TRANSFORMER AND BREAKER SIZES SHOWN IN ABOVE TABLES ARE RECOMMENDATIONS.
E.E. AND/OR E.C. TO VERIFY ELECTRICAL SPECIFICATIONS MEET CODE REQUIREMENTS.
RECOMMENDATIONS ABOVE MAINTAIN A MINIMUM OUTPUT OF > 3.3 kW PER PORT @ 208 V~.

CHARGEPOINT NETWORK DIAGRAM



LEGEND

	AC POWER FEED FROM DISTRIBUTION		4G LTE CELLULAR CONNECTION
	(3) CONDUCTORS, 6 AWG OR 8 AWG		WIFI CONNECTION
	ETHERNET CONNECTION		CHARGEPOINT CLOUD SERVICES
	SAE J1772 CONNECTOR		SAE J3400 (NACS) CONNECTOR

GENERAL NOTES

- ALL OVERCURRENT PROTECTION DEVICES, CONDUCTORS, AND CONDUIT SIZES PROVIDED ON THIS DRAWING ARE PROVIDED BY CHARGEPOINT FOR REFERENCE ONLY. SITE SPECIFIC WIRE SIZING SHALL BE PERFORMED BY THE INSTALLATION CONTRACTOR TAKING INTO ACCOUNT LOCAL CONDITIONS AND CODES / STANDARDS.
- CHARGEPOINT PRODUCTS TO BE INSTALLED BY A LICENSED CONTRACTOR WITH CHARGEPOINT INSTALLER CERTIFICATIONS.
- FOR MORE INFORMATION ABOUT CHARGEPOINT'S CPF50 LEVEL 2 AC CHARGER, REFER TO THE FOLLOWING LINKS:
 - CPF50 DATASHEET: <https://docs.chargepoint.com/ref-docs-sec/content/pdfs/2-ac/cpf50/cpf50-multifamily-ds.pdf>
 - CPF50 SITE DESIGN GUIDE: <https://docs.chargepoint.com/ref-docs-sec/content/pdfs/2-ac/cpf50/cpf50-sdg.pdf>
 - INSTALLATION GUIDES AVAILABLE TO CERTIFIED INSTALLERS: <https://www.chargepoint.com/partners/training-certification>

SOFTWARE & SERVICES

CHARGEPOINT CLOUD PLANS

ALL CPF50 STATIONS REQUIRE AN ACTIVE CHARGEPOINT CLOUD PLAN. A POWER, COMMUNITY OR ESSENTIAL CLOUD PLAN IS REQUIRED PER CHARGING PORT.

ADDITIONAL SOFTWARE OPTIONS AVAILABLE FOR FLEETS. CONTACT YOUR CHARGEPOINT REPRESENTATIVE FOR MORE INFORMATION.

POWER PLAN

CPCLD-POWER-n*
RECOMMENDED FOR ACCESS-CONTROLLED LOTS (E.G. ELECTRIFIED FLEETS, AUTO DEALERSHIPS, ETC.). PAID CHARGING NOT SUPPORTED.

*REPLACE "n" WITH DESIRED YEARS OF SERVICE (1, 2, 3, 4, OR 5 YEARS)

FOR INFORMATION ON POWER, COMMUNITY, AND ESSENTIAL CLOUD PLAN FEATURES, SEE TABLE BELOW AND VISIT:
<https://www.chargepoint.com/download-file/cp-cloud-plans-comparison-matrix-commercial>

CATEGORY	PLAN FEATURE	POWER	COMMUNITY	ESSENTIAL
GENERAL SUPPORT	4G LTE CELLULAR NETWORK CONNECTION	✓	✓	✓
	BASIC API ACCESS	✓	✓	✓
	24/7 SUPPORT FOR STATION HOSTS & DRIVERS	✓	✓	✓
STATION MANAGEMENT	STATION SOFTWARE UPDATES	✓	✓	✓
	REAL-TIME STATION STATUS	✓	✓	✓
	AGGREGATED REPORTING & ANALYTICS	✓	✓	✓
	USER MANAGEMENT & ADMINISTRATIVE TOOLS	✓	✓	✓
	VALET DASHBOARD	✓	✓	✓
BASIC POWER MANAGEMENT	STATION MESSAGES		✓	✓
	POWER SHARING AT CIRCUIT, PANEL, & SITE LEVELS	✓	✓	✓
	CABLE SHARING	✓	✓	✓
	FIXED POWER DERATING	✓	✓	✓
	HIERARCHICAL POWER SHARING	✓	✓	✓
DRIVER MANAGEMENT	DELAYED CHARGING SCHEDULING	✓		
	DRIVER MOBILE APP & WEB PORTAL		✓	✓
	ACCESS CONTROL		✓	✓
	PRICING CONTROL		✓	✓
	CONNECTIONS		✓	✓
DRIVER MANAGEMENT	NOTIFY ME WHEN AVAILABLE		✓	✓
	SHOW STATIONS ON CHARGEPOINT NETWORK MAP		✓	✓
	EV CHARGING NETWORK ROAMING		✓	✓
	TAP TO CHARGE		✓	✓

INSTALLATION & ACTIVATION

INSTALLATION	REQUIRED	ACTIVATION	REQUIRED
INSTALLATION TO BE COMPLETED BY AN ENTITY HOLDING THE CPF50 INSTALLATION MICROCREDENTIAL* FROM CHARGEPOINT UNIVERSITY.		ORDER CODE: CPF-ACTIVATION	
		REQUIRED FOR ALL CPF50 STATIONS.	
		INCLUDES ACTIVATION OF STATIONS BY A CHARGEPOINT REMOTE SERVICES TECHNICIAN.	

* CHARGEPOINT RECOMMENDS SELECTING A CHARGEPOINT AC CERTIFIED INSTALLER.

WARRANTIES

CHARGEPOINT ASSURE®	RECOMMENDED
ORDER CODE: CPF-ASSURE-n*	
INCLUDES PARTS COSTS AND LABOR COSTS FOR ISSUES COVERED UNDER WARRANTY	
INCLUDES LABOR AND TRAVEL COVERAGE TO REPAIR ISSUES NOT COVERED UNDER WARRANTY, SUCH AS VANDALISM AND ACCIDENTS.	
INCLUDES COORDINATION FOR SERVICE VISITS BY A CHARGEPOINT TECHNICAL SUPPORT ENGINEER.	
NOT AVAILABLE WITH ESSENTIAL CLOUD PLAN.	
VISIT https://www.chargepoint.com/download-file/chargepoint-assure-brochure-us FOR MORE INFORMATION	

*REPLACE "n" WITH DESIRED YEARS OF SERVICE (1, 2, 3, 4, OR 5 YEARS)

STANDARD WARRANTY

- 2 YEARS, PARTS ONLY; STATION MUST BE INSTALLED BY A CHARGEPOINT CERTIFIED TECHNICIAN.



GLOBAL HEADQUARTERS
240 EAST HACIENDA AVENUE
CAMPBELL, CA 95008
TEL: +1 (408) 841-4500

CONCEPT DRAWING
NOT FOR CONSTRUCTION

DRAWING TITLE:
CHARGEPOINT CPF50

TYPICAL MULTIFAMILY DESIGN -
SINGLE LINE DIAGRAM

DOCUMENT #: 32105001c
DATE: 08.04.25
DRAWN BY: CMT
SCALE: N.T.S.

SHEET:

EV501