

COTEK

compact and powerful...



CX Series Advanced Battery Charger

- ★ Small dimension
- ★ Simple interface
- ★ Smart communication
- ★ Silent operation
- ★ Special battery maintenance





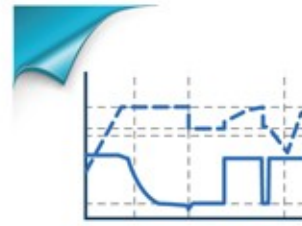
Extend
your enjoyable time!

User Benefits



ESB maintenance function

Keep ESB (Engine Start Battery) in good condition



User programmable charging curve

Provide flexibility for various battery types



Temperature compensation

Extend batteries' life and reduce life cycle cost



-20~50°C operation temperature

Operate under tough conditions



Sleep mode

Keep charging in silent during sleep



Failure alarm by dry contact

Recognize abnormal symptoms easier

Three-stage Charging Curve

	BULK(CC)	ABSORPTION(CV)	FLOAT	RECONDITION	FLOAT	BULK(CC)
14.4/28.8 V						
13.8/27.6 V						
12.8/25.6 V						
Current	High	Decreasing	Low	High	Low	High
Voltage	Increasing	Constant	Constant	Increasing	Constant	Increasing
	Return amps = 6.25% of rated current					
	BULK 2 min-8 hours	ABSORPTION 0.25 hours-24 hours	FLOAT 2 Weeks	RECONDITION 85 min	FLOAT 2 Weeks	BULK 2 min-8 hours
Charging stage	Reduce charging time by charging at maximum current (Constant current mode)	Make sure the battery is fully charged without overcharging (Constant voltage mode)	Maintain the battery at 100% charge condition	Reconditioning the battery	Maintain the battery at 100% charge condition	Once battery voltage is below 12.8/25.6V, after 30 seconds, CX will turn from FLOAT to BULK
Charging spec	Charging at rated current	14.4V / 28.8V until the current drops to 6.25% of rated current	Stay at 13.8V / 27.6V	14.4V / 28.8V with rated current	Stay at 13.8V / 27.6V	

Specification



CX 12



	Model	CX1215	CX1225	CX1235	CX1250	CX1280
Output	Battery Type	Lead Acid / Li-ion / Gel /AGM				
	Standard Boost Charger Voltage	14.4V / 14.7V (Select by switch)				
	Standard Float Charger Voltage	13.8V / 13.5V (Select by switch)				
	Main Rated Current	15A	25A	35A	50A	80A
	Current Range	0~15A	0~25A	0~35A	0~50A	0~80A
	Main Output	1	2	2	3	3
	ESB Output	1	1	1	--	--
	ESB Output Voltage/Current	13.8V / 2A	13.8V / 2A	13.8V / 2A	--	--
	Battery Charging Mode	3 stage charging capability				
	Single Output Current Limit	15A	25A	35A	40A	40A
Input	Voltage Range	90 ~ 264VAC				
	Power Factor (Typ.)	PF > 0.92 at full load				
	Frequency Range	47 ~ 63Hz				
	Efficiency (Typ.) at 230 Vac	87%	87%	87%	87%	87%
	AC Current (Typ.)	2.5A / 100VAC	4.1A / 100VAC	6.2A / 100VAC	8.24A / 100VAC	13.3A / 100VAC
		1.07A / 240VAC	1.8A / 240VAC	2.8A / 240VAC	3.6A / 240VAC	5.4A / 240VAC
Leakage Current	For earth < 1mA / 240VAC					
Protection	Short Circuit	Current limit < 1A (30 seconds)				
	Over Voltage	17.5V ± 1%, Protection type: Shutdown output (recovery after resetting AC power on)				
	Over Temperature	Charger Over Temperature 100 ± 5°C detected by heat sink				
Battery Over Temperature 52 ± 5°C (Optional device - COTEK temperature sensor), connect on CN3						
Function	Alarm Signal	N.C. / N.O. Relay contact output				
	Power Mode	Supply 13.2V Current limit output voltage				
	Temperature Compensation	-10mV / 0.5°C with COTEK temperature sensor				
	Charging Sleep Mode <small>Note.1</small>	By remote controller and S1-4 DIP switch				
	Remote Controller (Optional)	CR-1				
Environment	Working Temp.	-20°C ~ -50°C (refer to output load de-rating curve)				
	Working Humidity	20 ~ 90% RH non-condensing				
	Storage Temp., Humidity	-40°C ~ +85°C, 20 ~ 90% RH				
	Temp. Coefficient	± 0.03% (0°C ~ 50°C)				
	Vibration	10 ~ 500Hz, 2G 10min. / 1cycle period for 60min. each along X, Y, Z axes				
Safety & EMC <small>Note.2</small>	Safety Standards	Certified EN 60335-1, EN 60335-2-29				
	Withstand Voltage	I/P - O/P: 4242VDC, I/P - FG: 1768VDC, O/P - FG: 700VDC				
	Isolation Resistance	I/P - O/P: 100M Ohms/500VDC				
	EMI Conduction & Radiation	Certified EN 55022; EN 61204-3; EN 55014-1				
	Harmonic Current	Certified EN 61000-3-2, -3-3; EN 61204-3; EN 61000-6-3				
	EMS Immunity	Certified EN 55024; IEC 61000-4-2, 3, 4, 5, 6, 8, 11; ENV 50204; EN 61000-6-1; EN 55014-2				
Other Information	Dimension (WxHxD)	183x72x243 mm	183x72x243 mm	183x72x263 mm	213x77x272 mm	213x77x272 mm
	Net Weight	1.6kg	1.7kg	1.9kg	3.1kg	4.0kg
Note	1. When use sleep mode, please refer to charging current v.s. heat sink temperature de-rating curve. 2. The charger is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that still meets EMC directives.					

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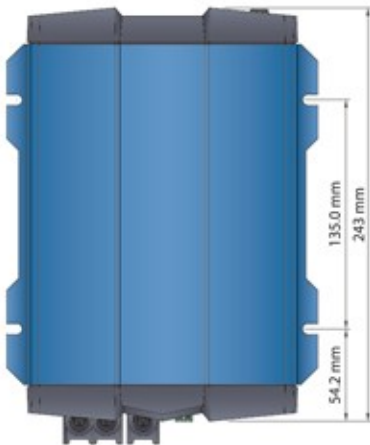


Model	CX2415	CX2425	CX2440	
Output	Battery Type			Lead Acid / Li-ion / Gel /AGM
	Standard Boost Charger Voltage			28.8V / 29.4V (Select by switch)
	Standard Float Charger Voltage			27.6V / 27V (Select by switch)
	Main Rated Current	12.5A	25A	40A
	Current Range	0~12.5A	0~25A	0~40A
	Main Output	2	3	3
	Battery Charging Mode			3 stage charging capability
	Single Output Current Limit	12.5A	25A	40A
Input	Voltage Range			90 ~ 264VAC
	Power Factor (Typ.)			PF > 0.92 at full load
	Frequency Range			47 ~ 63Hz
	Efficiency (Typ.) at 230 Vac	90%	90%	90%
	AC Current (Typ.)	4.2A / 100VAC	8.3A / 100VAC	13.3A / 100VAC
		1.7A / 240VAC	3.6A / 240VAC	5.4A / 240VAC
	Leakage Current			For earth < 1mA / 240VAC
Protection	Short Circuit			Current limit < 1A (30 seconds)
	Over Voltage			35V ± 1%, Protection type: Shutdown output (recovery after resetting AC power on)
	Over Temperature	Charger Over Temperature 100 ± 5°C detected by heat sink		
		Battery Over Temperature 52 ± 5°C (Optional device - COTEK temperature sensor), connect on CN3 Protection type : Auto recovery after heat sink temperature goes down to 50°C		
Function	Alarm Signal			N.C. / N.O. Relay contact output
	Power Mode			Supply 26.4V Current limit output voltage
	Temperature Compensation			-10mV / 0.5°C with COTEK temperature sensor
	Charging Sleep Mode	Note.1 By remote controller and S1-4 DIP switch		
	Remote Controller (Optional)	Support COTEK Remote Controller CR-1 setting Function (CN3 or CN4)		
Environment	Working Temp.			-20°C ~ -50°C (refer to output load de-rating curve)
	Working Humidity			20 ~ 90% RH non-condensing
	Storage Temp., Humidity			-40°C ~ +75°C, 20 ~ 90% RH
	Temp. Coefficient			± 0.03% (0°C ~ 50°C)
	Vibration			10 ~ 500Hz, 2G 10min. / 1cycle period for 60min. each along X, Y, Z axes
Safety & EMC <small>Note.2</small>	Safety Standards			Certified EN 60335-1, EN 60335-2-29
	Withstand Voltage			I/P - O/P: 4242VDC, I/P - FG: 1768VDC, O/P - FG: 700VDC
	Isolation Resistance			I/P - O/P: 100M Ohms/500VDC
	EMI Conduction & Radiation			Certified EN 55022; EN61204-3; EN 55014-1
	Harmonic Current			Certified EN 61000-3-2, -3-3; EN 61204-3; EN 61000-6-3
	EMS Immunity			Certified EN 55024; IEC 61000-4-2, 3, 4, 5, 6, 8, 11; ENV 50204; EN 61000-6-1; EN 55014-2
Other Information	Dimension (WxHxD)	183x72x243 mm	213x77x272 mm	213x77x312 mm
	Net Weight	1.6kg	2.9kg	3.9kg
Note	1. When use sleep mode, please refer to charging current v.s. heat sink temperature de-rating curve. 2. The charger is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that still meets EMC directives.			

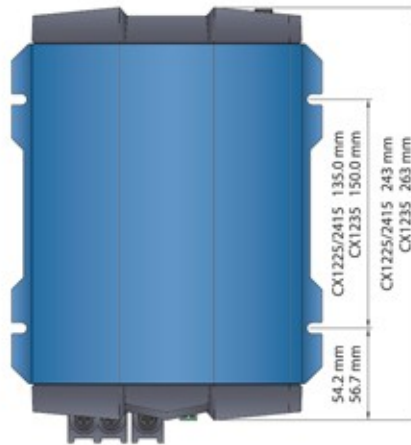


Dimension

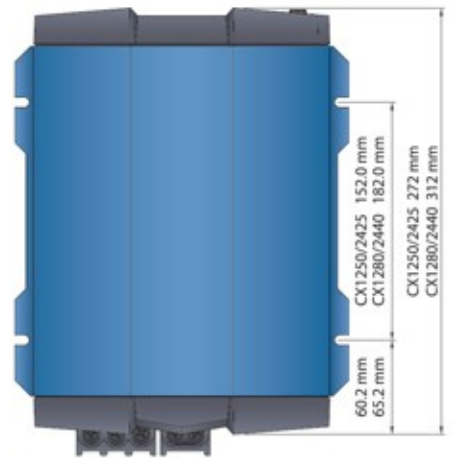
CX1215



CX1225/1235 CX2415



CX1250/1280 CX2425/2440



About COTEK



COTEK is committed to providing proactive service, innovative technology and total quality assurance since we were established in 1986. With Corporate Offices in Tao-yuan, Taiwan, COTEK is a technology-oriented company focusing on developing, designing and manufacturing products including:

- DC/AC Pure Sine Wave inverter-150 Watts ~ 4,000 Watts
- Inverter/Charger
- Battery Charger
- AC/DC Switching Mode Power Supply-5 Watts ~ 3,000 Watts
- LED Driver

Contact Us

No.33, Sec. 2, Renhe Rd., Daxi Dist., Taoyuan City 33548, Taiwan
Phone : +886-3-3891999 FAX : +886-3-3802333
http : // www.cotek.com.tw

