

20W USB C Charger



■ Features:

- Miniaturized Design: Small size and light weight
- No-load consumption < 0.1W, Meet DOE VI
- Support protocols: PD, QC, FCP
- Protections: Short circuit / Overload / Overvoltage / OverTemperature
- RoHS, Reach compliance

■ Application:

- Mobile Phone
- Tablet
- Digital Product (USB-C Charge)

■ Description:

The FC020X series model is a USB C charger with a plastic shell design, which can effectively prevent users from electrical hazards. Its efficiency meets the latest energy efficiency requirements. It can work safely and effectively at an ambient temperature of 0°C to 40°C. It has complete Protection function and compliance with electronic information & audio and video (IEC60950, IEC60065, IEC62368) related certifications, compatible with PD, QC, FCP and other protocols, enabling quick charging of mobile phones and tablet products.

Key Specification

Model	FC020P01-090022C		
Output	Voltage	5V3A/9V2A/12V1.5A	
	Protocol	PD3.0/FCP/QC2.0/QC3.0	
	Ripple&Noise(pk-pk) Remark2	200mVp-p	
Input	Voltage range	90 ~ 264VAC	
	Frequency range	47 ~ 63Hz	
	Efficiency(Typ.)	85%	
Safety	Safety standards	IEC/EN60950、60065、62368	
	Safety Type	“●” Indicates that it is currently certified, “◎” Indicates that the applicant meet the certification requirement but not be certified	
	CB	◎	
	CE+LVD	◎	
	BIS	◎	
	UL/CUL	◎	
	GS	◎	
	PSE	◎	
	PSB	◎	
	CCC	◎	
	RCM	◎	
	BSMI	◎	
	IRAM	◎	
	KC	◎	
	SABS	◎	
SASO	◎		
EAC	◎		
B-MARK	◎		
SII	◎		
BR	◎		

20W USB C Charger

Electrical Specification

Model		FC020P01-090022C			
Output	Voltage	5V3A/9V2.22A/12V1.5A			
	Protocol	PD3.0/FCP/QC2.0/QC3.0			
	Ripple&Noise(pk-pk)	200mVp-p			
	Start and Rise time	3000ms, 80ms/230VAC			
Input	Voltage range	90 ~ 264VAC			
	Frequency range	47 ~ 63Hz			
	Standby Power Consumption	100mW			
	Efficiency(Typ.)	85%			
	Input current(Typ.)	0.6A max @100~240Vac			
	Surge current(Typ.)	COLD START 60A/100Vac, 100A/240Vac			
Protection	OverLoad	140% max of rated output current Recovers automatically after fault condition is removed			
	Overvoltage	11.5Vmax			
		Protection Type: Turn off the output, through the PWM control chip built-in VDD voltage clamping			
Environment	Operating Temperature	0~ +40°C			
	Operating Humidity	20 ~ 85% RH, non-condensing			
	Storage Temperature&Humidity	-20 ~ +75°C, 5 ~ 95% RH, non-condensing			
	Temperature coefficient	±0.03%/°C (0~ 40°C)			
	Vibration resistant	10 ~ 500Hz, 1G 10min/circle, X, Y, Z 30mins for each			
	Altitude	2000m			
	Withstande voltage	I/P-O/P:3KVAC			
	Isulation resistant	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH			
EMC	EMI	Parameter	Standard	Test Level / Note	
		Conducted	EN55032(CISPR32), FCC Part 15B Class B		
		Radiated	EN55032(CISPR32), FCC Part 15B Class B		
		Harmonic	EN61000-3-2 Class A		
		Voltage	EN61000-3-3 -----		
	EMS	EN55035, EN61000-6-2, EN61204-3			
		Parameter	Standard	Test Level /Note	
		ESD	EN61000-4-2		Level 3, 15KV air; Level 2, 8KV contact, criteria A
		Radiated Susceptibility	EN61000-4-3		Level 3, criteria A
		EFT/Burest	EN61000-4-4		Level 3, criteria A
		Surge	EN61000-4-5		Level 4, 4KV/L-N, criteria A
		Conducted	EN61000-4-6		Level 3, criteria A
		Magnetic Field	EN61000-4-8		Level 4, criteria A
		Voltage Dips and interruptions	EN61000-4-11		>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250
Others	MTBF	≥100K hrs. MIL-HDBK-217F (25°C)			
	Size(W*H*D)	43*41*29mm			
Remark	<p>1. All specifications and parameters shall be measured at the input of 230VAC, rated load and ambient temperature of 25°C unless otherwise specified.</p> <p>2. Ripple and noise measurement method: capacitance of 0.1uF and 47uF in parallel at the terminal and the measurement is performed under the 20MHZ bandwidth.</p> <p>3. Accuracy: includes setting error, linear adjustment rate and load adjustment rate.</p> <p>4. The power supply adapter is an independent component, but the final adapter still needs to be confirmed in connection with the electromagnetic compatibility of the terminal equipment.</p>				

