

GOGATE ELECTROSYSTEMS (N) PVT LTD.

## DESIGN AND DEVELOPMENT

PRODUCT SPECIFICATIONS Battery Charger PS-2410N-6K

Doc. No. : PS/ D&D/2410N-6K/68

Rev. No. : 07

Rev. Date: 22/07/2021

# Specification sheet for Battery Charger PS-2410N-6K

INPUT	VOLTAGE RANGE	190VAC - 300VAC			
	FREQUENCY RANGE	50 Hz ± 10%			
OUTPUT	DC VOLTAGE	24VDC nominal			
		(Output Voltage based on battery condition 21-28.5VDC)			
	FLOAT VOLTAGE	26.95 – 27.45 VDC			
	BOOST VOLTAGE	27.95 – 28.45 VDC (Activated above 1.3- 1.9Amp)			
	RATED CURRENT	10A			
	Battery charging current setting Provided according To Battery (AH) - 3 Amp, 5 Amp,				
	and 10 Amp with impulsive charging				
	RIPPLE	<1%			
	NOISE	<2%			
	EFFICIENCY	>80%			
	LINE REGULATION	±1% with 10-100% load			
	LOAD REGULATION	±1% with 10-100% load			
LED INDICATIONS	INPUT UNHEALTHY	Red LED glow when Input voltage goes below 180volt and			
		above 300VAC			
	FUSE FAIL	Red LED glow when input fuse get failed			
	MAINS ON	Green LED glow when mains supply is present			
	FLOAT MODE	Green LED glow when battery charger output is present ar			
		output current is less than 1.3- 1.9Amp			
	BOOST MODE	Yellow LED glow when battery charger output is present ar			
		output current is above 1.3- 1.9Amp			
	OUTPUT OVERLOAD	Red LED glow when output current exceeds beyond 18-20			
		Ampere			
	BATTERY LOW	Red LED glow when battery voltage falls below 22.5 -23.			
	PRE-CUT	VDC			
	BATTERY REVERSE	Red LED glow when battery is connected with reverse			
		polarity with mild buzzer			
	OUTPUT ON	Green LED glow when battery charger output is present			
		either on mains mode or battery mode			

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Prepared By	R.C	Checked By	V.G	Approved By	A.P	









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		<u> </u>
POTENTIAL FREE	AC FAIL	Relay contact operates when AC mains supply is healthy
CONTACTS	CHARGER FAIL	Relay contact operates when Charger Output is healthy
	DC FAIL	Relay contact operates when DC supply is healthy
		The state of the s
PROTECTIONS	INPUT OVER VOLTAGE	Shutdown output voltage when input voltage is above
TROTECTIONS	IN OI OVER VIEW	300VAC charger sustains min 5minutes at 315Vac, turns on
		output when input voltage is within operating range
	OUTPUT OVER	Constant output voltage control by feedback loop
	VOLTAGE	Constant carpat total and the constant of the
	OVER TEMPERATUE	Shutdown when temperature goes too high, and also
		automatically recovers when temperature becomes normal.
	OUTPUT OVERLOAD	Shut down output when output current goes beyond 18-20
	PORTECTION	Ampere
	BATTERY LOW PRE-	Disconnect battery from charger when battery voltage falls
	CUT	below 22.5 -23.5 VDC
	BATTERY LOW OUTPUT	Disconnect battery from charger when battery voltage falls
	CUT	below 20 -21 VDC
	BATTERY REVERSE	Disconnect battery from charger when battery is connected
		with reverse polarity
	INPUT TRANSIENT	Input transient voltage protection by suitably rated VDR
	VOLTAGE POTECTION	
SAFETY	HIGH VOLTAGE	Terminal-Chassis :2kV AC for 1 minutes
All Administrations in parent	WITHSTAND CAPACITY	50000-000000000000000000000000000000000
	INSULATION	I/P-O/P, I/P-FG, O/P-FG: Above 100M Ohms at 500VDC
	RESISTANCE	35 S5 7879 S500 AV
EMC	Design with complied to	70.
	E.F.T	IEC 61000-4-4 Level 4
	SURGE	IEC 61000-4-5 Level 6K
	ESD	IEC-61000-4-2
		(15KV- Air Discharge, 8KV-Contact)
	VOLTAGE DIPS TEST	IEC 61000-4-11
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ENVIRONMENTAL	AMBIENT TEMPERATURE OPERATION	PERATURE		
	AMBIENT TEMPERATURE STORAGE	-20° C To +65° C		
	HUMIDITY	95% RH, non-condensing		
MECHANICAL	DIMENSION	255mm (Width) X 180mm (Depth) X 92mm (Height)		
	MOUNTING	Back Mounting		
		Width 295mm including mounting		
		Mounting hole to hole :275mm X 50mm		
		Mounting hole Diameter: 8mm		
		Quantity: 4 Nos.		
	WEIGHT	3.0 Kgs		
	COLOR	Black (Powder coating)		

#### **Product Photo:**



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