

INTEGRITAS

Utility Grade Charger and Battery Reserve All-in-One System

The Integritas, GE's highest reliability industrial battery charger, is best in class. It is designed for cabinet, wall-mount or rack-mounted applications and boasts true redundancy. It is managed via the state of the art controller with monitoring capabilities, coupled with NERC compliance. The Integritas series chargers can be configured for 24, 48 or 125Vdc output with capacities ranging from 20A to 300A. The utilities market has never been provided this scalability coupled with significantly higher power density. The system features integrated, simple to operate, advanced monitoring and control. The Integritas uses field proven technology and battle hardened gear that offers market-leading reliability. Advanced maintenance and monitoring solutions provides better visibility and more time to react to any event.

STANDARD FEATURES

- N+1 and N+N redundancy
- Front panel access to most control and monitoring parameters, including alarms
- Wide input voltage range
- Hot pluggable charger & control modules
- Rack mount, wall mount, ground mount or cabinet.
- Controller independent of system operation
- Secured remote access and monitoring

OPTIONAL FEATURES

- Dual AC input
- Secondary output breaker for battery test or external loads

BATTERY RACK FEATURES

- NEBS3—Zone 4 Seismic Battery Rack (Shown)
- Fits (2) Strings of 120V, (6) Strings of 48V, or (12) Strings of 24V
- Optional DC disconnects located near battery strings or in plant
- Strings capacity can range from 45Ah to 210Ah
- Universal fit for 12V Front Terminal Batteries



APPLICATIONS

Battery Charging/Standby Power	Pump Control/Supply	Emergency Lighting	Switchgear Control Power
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SPECIFICATIONS

<u>Input</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>
Voltage Range -1Φ High-Line -1Φ Low-Line	- 175Vac 85Vac	- 220Vac 110Vac	- 305Vac 140Vac
Frequency	45Hz	60Hz	66Hz
Power Factor	98%	99.5%	
Total Harmonic Distortion	5%		

<u>Output</u>	<u>IP100ACR024ATEZ - 1Φ</u>	<u>IP050ACR048ATEZ - 1Φ</u>	<u>IP020ACR125ATEZ - 1Φ</u>
Nominal Voltage	24Vdc	48Vdc	125Vdc
Output Current	100A	50A	20A
Vo Setpoint (Factory)	27.25Vdc	54.5Vdc	125Vdc
Vo Range	21-29Vdc	42-58Vdc	90-160Vdc
Regulation (With Controller)	±0.5%	±0.5%	±0.5%
Efficiency	> 95% (Peak 95.6%)	> 96% (Peak 96.4%)	> 94.5% (Peak 95.1%)
Output Voltage Ripple	100mVrms	100mVrms	150mVrms
Thermal Output (Max)	620 BTU/hr	510 BTU/hr	544 BTU/hr

Mechanical

Module L x W x H (in. /mm.)	9/229 x 1.7/43 x 24/610		
System L x W x H (in. /mm.)	14/356 x 17.5/445 x 28.25/718 or 14/356 x 23/584 x 28.25/718		
Module Weight (lb /Kg)	12.1/5.5	12.1/5.5	12.1/5.5
System Weight (lb /Kg)	60/27.2—84/38.1	60/27.2—133/60	60/27.2—133/60

Safety and Standards Compliance

NEMA	NEMA PES for modules, NEMA 2 Enclosure
Safety	UL 1012, ANSI/UL60950-1-2014 and CAN/CSA C22.2 No. 60950-1-07, Second Edition + A2:2014 (MOD), dated October 14, 2014
RoHS	Compliant to RoHS EU Directive 2002/95/EC RoHS 6/6
EMC	European Directive 2014/30/EU; EN55032, Class B, EN55035; FCC, Class B
ESD	EN61000-4-2, Level 4

Environmental

Operating Temperature	-40°C to +75°C (-40°F to 167°F) (de-rates above 50°C)
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Relative Humidity	95% max, non-condensing
Altitude	4000M (for altitudes above 2000M, peak operating temperature de-rates 0.656° C /100M; 4000M peak temperature rating is 62° C)