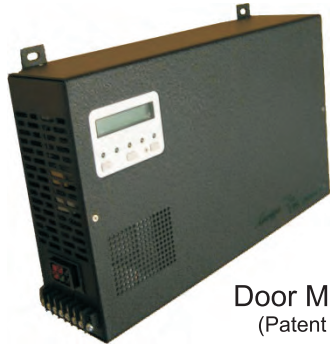


DUAL CONVERSION TRAFFIC LIGHT UPS SYSTEMS



Door Mount UPS
(Patent Pending)



Shelf Mount UPS
(Patent Pending)

DESCRIPTION: The Always "On"[™] NDM (door mount) and NSM (shelf mount) Series UPS's are dual conversion on-line UPS systems provided in slim, light weight door mount and shelf mount configurations. The NDM Series allows the user to mount the UPS system in a space limited situation. The dimensions of this compact system are 9" x 15" x 3.5", while the NSM units measure 11.4" x 15.8" x 4.4". The included mounts allow the user to install the NDM system directly to a door, wall or confined enclosure with ease, with the batteries located separately up to six feet away.

APPLICATIONS: Our door mount and shelf mount on-line UPS's are ideal for traffic cabinets, panel mounting, specialized equipment, LAN file servers, personal computers, networks and workstations, Automatic Teller Machines, telecommunications equipment, laboratory and medical equipment, test equipment, POS equipment, robotics, PLC's, security and emergency systems, military & government applications and other standard computerized equipment.

ADVANCED FEATURES: Features include utility input power factor correction, self-diagnosis, an LCD display, a static bypass, smart power source monitoring and battery management, noise and lightning/surge protection, spike and transient protection, cold start/auto restart, auto frequency detection and an intelligent communications interface. SNMP and AS-400 adapters are available for network management.

COMPLETE PROTECTION: NDM and NSM Series UPS's are designed with comprehensive spike, transient and surge protection, which prevents destructive hardware damage and extends system life. The high end EMI/RFI filtering design prevents electrical common and normal mode noise from affecting controller or computer operation, data or files, including when the UPS is operating in Bypass Mode. There is no transfer time to back-up and the load will never see a fluctuation.

OPERATING VOLTAGES AND FREQUENCIES: The NDM and NSM Series UPS's are designed to function at wide voltage variations and frequency variations. This wide input range requires less battery usage under normal operations, extending the battery life substantially. The automatic frequency sensing function will synchronize the input and output frequencies. This makes the NDM and NSM Series ideal for connecting to a dirty generator, as it will also clean up the power.

AUTO RESTART: This user selectable feature allow NDM and NSM Series UPS's to restart automatically when the utility becomes available, provided the UPS has been shutdown due to an extended blackout.

SELF-DIAGNOSIS AND INFORMATION INDICATORS: Each NDM and NSM Series UPS is equipped with a microprocessor that performs monthly self-diagnosis and battery load tests. Key diagnostic features include a monthly battery test algorithm and a system performance check.

CHARGING CURRENT WITH LOW RIPPLE AND LOW HARMONICS: A control circuit is used to provide a strict sine wave with low ripple and low harmonic distortion from the charging circuit. This reduces the conducted electromagnetic interference to other loads sharing the same distribution panel with your UPS.

SMART POWER SOURCE MONITORING AND BATTERY MANAGEMENT: Via microprocessor-based electronics, NDM and NSM Series UPS's produce a strict true sine wave output regardless of the input. They also control the on-battery and low battery shutdown, which prevents full discharge, thereby extending the battery performance and battery life.

INTELLIGENT COMMUNICATION INTERFACE: Each NDM and NSM Series UPS is equipped with RS232 and dry contact interface ports, for which we provide various powerful management software programs. For the more complex network environment, we support SIMPLE NETWORK MANAGEMENT PROTOCOL (SNMP), AS400 and others. Optional timed contacts are available.

REMOTE SHUTDOWN AND EMERGENCY STOP: Features include remote shutdown via communication port and emergency stop via communication port, as well as an optional additional connector or push button.

OPTIONAL EXTENDED RUNTIMES: To meet your back-up time requirements, we offer increased back-up time by simply adding additional hot pluggable battery cabinet(s).

DOOR/SHELF MOUNT ON-LINE UPS

NDM-SERIES	MODEL NO.	GES-102NDM / 102NSM	GES-152NDM / 152NSM
GENERAL	Maximum Capacity	1000VA/700W	1500VA/1050W
	UPC Order Code	825433 30218 / 825433 30223	825433 30317 / 825433 30224
INPUT	Nominal Voltage	120VAC (OPTIONAL 220VAC AVAILABLE)	
	Voltage Range	60VAC/40% Load, 70VAC/70% Load, 80VAC - 144VAC/100% Load	
	Bypass Voltage	+/-10%, +10/-15%, +15/-20% (User Selectable)	
	Phase	Single Phase (L-N-G)	
	Frequency	50 or 60Hz Auto Sensing	
	Frequency Window	45-65Hz (+/-2%, +/-5%, +/-7% - User Selectable)	
	Synchronization Window	+/- 3Hz	
	Power Factor	0.97	
	OUTPUT	Output Voltage	100/110/115/120/127VAC (User Selectable)
Voltage Regulation		+/- 2%	
Frequency Regulation		+/- 0.25Hz (Battery or Free Run Mode)	
Voltage Distortion - THD		<3% Linear Load, <5% Non-linear Load	
Transient Response		4% (100% Load Change)	
Overload Capacity		125% for 1 min. / 150% for 10 sec.	
Maximum Output Current @ 120VAC		8.2A	12.4A
Crest Factor		3:1	
Efficiency		>83%	
Transfer Time		Zero	
BATTERY (External)	Battery Type	Sealed Lead Acid, Maintenance Free - Hot Swappable Cabinet/String	
	Battery String	3	
	DC Voltage in String	36VDC	
	Recharge Time	Depends on External Batteries	
	Advanced Battery Management	Auto Self-test, Temperature Compensated 3-Stage Charging, Load Dependent Discharge	
	Extended Runtime	Battery Banks and Strings Available	
PROTECTION	Output Short	YES	
	Abnormal Voltage	YES	
	Abnormal Frequency	YES	
	I/O Noise Protection	Common & Normal Noise Suppression	
	I/O Spike and Transient	YES	
INTERFACE	Display	LCD / LED - Status, Readings and Setup Parameters	
	Audible Alarms	On Battery, Low Battery, Overload, Fault	
	Communications	RS232 / Dry Contact / (Optional: USB, SNMP, AS400)	
	Emergency Power OFF	YES - Via Normally Closed Contact	
ENVIRONMENT	Operating Temperature	-30 to 60 °C (-22 to 140 °F) (Extended range available [-40 to 74 °C])	
	Humidity	0 - 95% (Non-condensing)	
	Audible Noise	<40 dBA at 1 Meter	
CONFORMANCE	Safety	UL 1778, CE	
	EMI/RFI	FCC Part 15	
PHYSICAL DATA -NDM	W x D x H mm (in.)	230 x 380 x 90 (9" x 15" x 3.5")	
	Weight in kg (lbs.)	6.0 (13.2)	7.5 (16.5)
PHYSICAL DATA -NSM	W x D x H mm (in.)	289 x 401 x 109 (11.4" x 15.8" x 4.4")	
	Weight in kg (lbs.)	7.7 (17.0)	7.7 (17.0)

Specifications are subject to change without notice to reflect upgrades and improvement in technology.

OTHER VOLTAGES AND CONFIGURATIONS ARE AVAILABLE; FOR ORDER CODES, CONSULT MANUFACTURER.

AN EXTERNAL WRAP-AROUND BYPASS MODULE IS AVAILABLE FOR ALL MODELS, PERMITTING UPS MAINTENANCE WITHOUT POWER INTERRUPTION TO THE LOAD.

