

ONYXTM

Large Capacity
Lithium Ion Batteries

Reliable energy storage
for power applications with
long runtime.



Features include:

LITHIUM ION CHEMISTRY

- + Lightweight, high performance

INTEGRATED BATTERY MANAGEMENT SYSTEM (BMS)

- + Controls critical functions to ensure safety and reliability
- + Monitors voltage and current
- + Controls charging
- + Protects the battery from over-charge and over-discharge
- + Performs "State of Charge" calculation
- + Performs individual cell balancing within the module
- + Internal memory tracks operating conditions

VIRTUAL BATTERY CONFIGURATION

- + Multiple batteries can be connected in parallel to increase capacity
- + Multiple banks can be connected in parallel to further increase capacity

INTEGRATED STATUS INDICATOR

- + Red/green LED visually indicates battery status

CAN BE INSTALLED IN ANY ORIENTATION

- + Bottom, side or end

FLAME RETARDANT ABS PLASTIC HOUSING

- + ABS UL 94V0

STANDBY SERVICE

- + 10 years at 25°C/77°F per Telcordia GR-3150-CORE Section 5.1.4

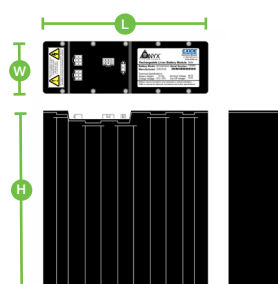
CYCLING SERVICE

- + Exceeds 1,000 cycles at 80% depth of discharge

AVAILABLE DATA LOGGER

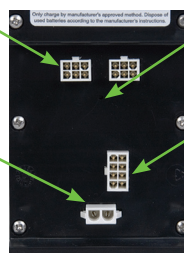
- + Remote access and communication capability
- + Reduced maintenance costs
- + SD memory card slot

CAPACITY, DIMENSIONS & WEIGHT											
MODEL	DESCRIPTION	NOMINAL VOLTAGE	NOMINAL CAPACITY (Ah) 8HR. RATE @ 25°C	INCHES			MILLIMETERS			WEIGHT	
				L	W	H	L	W	H	LBS.	KG.
M70X24V068P	Positive 24/68Ah	+24	68	10.7	3.4	14.4	272	86	366	29.5	13.4
M70X48V010P	Positive 48/10Ah	+48	10	10.1	3.4	5.9	256	86	150	8.8	4.0
M70X48V024P	Positive 48/24Ah	+48	24	10.1	3.4	10.7	256	86	272	19.4	8.8
M70X48V034P	Positive 48/34Ah	+48	34	10.1	3.4	14.4	256	86	366	27.3	12.4
M70X48V010N	Negative 48/10Ah	-48	10	10.1	3.4	5.9	256	86	150	8.8	4.0
M70X48V024N	Negative 48/24Ah	-48	24	10.1	3.4	10.7	256	86	272	19.4	8.8
M70X48V034N	Negative 48/34Ah	-48	34	10.1	3.4	14.4	256	86	366	27.3	12.4



MDC Connectors

High Voltage Connector



Multi-Colored LED

SDC Connector



Ethernet Connector

SDC Connector

Colored LED
SD Memory Card Slot

SPECIFICATIONS	+24V LINE	-48V LINE	+48V LINE
MAXIMUM CHARGE VOLTAGE	29.0 +/- 0.3V	53.8 +/- 0.5V	53.8 +/- 0.5V
OPERATING TEMPERATURE / DISCHARGE	-20°C (-4°F) to +60°C (+140°F)		
OPERATING TEMPERATURE / CHARGE	0°C (32°F) to +45°C (+113°F)		
DISCHARGE CUT-OFF	22.6V	42.0V	42.0V
PEAK DISCHARGE CURRENT / LESS THAN 30 SEC.	20A	15A	20A
MAXIMUM CONTINUOUS DISCHARGE CURRENT	15A	10A	15A
PEAK CHARGE CURRENT / LESS THAN 30 SEC.	20A	15A	20A
MAXIMUM CHARGE CURRENT	15A	10A	15A
APPROXIMATE CHARGE TIME	5 hrs.	5 hrs.	5 hrs.
UL 1642, UN 38.3 CERTIFICATIONS	All products		
NEBS 1 & 3 CERTIFICATION	M70X48V024N (Negative 48/24Ah)		
STORAGE TEMPERATURE	-20°C (-4°F) to +45°C (+113°F)		
ALARM AND MONITORING	Dry contact / Data logger with alarming / Internet (TCP/IP)		
BATTERY STATUS INDICATOR	Multi-colored LED		

Performance may vary depending on application and usage. Performance will be reduced if used outside of specifications and may void warranty. Design and/or specifications are subject to change without notice. Do not use for detailed design of equipment or facilities.

If questions arise, contact your local Exide/ReStore Energy Systems sales representative for clarification.