



Symmetra

A

QUICK SUMMARY

FAULTS! - ACTION NEEDED

PREVENTIVE MAINTENANCE DETAILS

Facility Name		Date	14-Nov-18
Room Location	IT Room	Arrival Time	5p
PM Type	Annual Major	Tech Name	James
Service Plan	None	Plan Code	

(1) Physical Inspection / Status

Primary Systems	Unit	XR Pack	Bypass
INFORMATION			
Description	Symmetra LX 12kva	Yes	NO
Model	SY12K16RMP	SYAXR9B9	
Serial #	QD0728380227	QD0924160218	

STATUS REPORT

Condition, Operation, Etc	Multiple Faults on arrival			
Serial #s (IM)	QS07...0008/QD07...0339			
Power Modules	L1	BAD	QD1119170701	REPAIRED ONSITE
	L2	OK	QD1112170883	
	L3	OK	QD1112171251	
	L4	EMPTY		
	L5	EMPTY		
Batteries				XR BATTERIES
	R2	Feb-18	UD1809T65664	#0345 - Old, Ok
	R3	Mar-18	UD1247002874	#0411 - Old, Ok
				#0347 - Old, Ok
				#0412 - Old, Ok
On Site Corrections.				#0413 - Old, Ok
				#0410 - Old, Ok
				#0417 - Old, BAD
				#0346 - Old, BAD

INPUT/OUTPUT

Input Type	Receptacle [] Nearby Panel [] Disconnect [x] Other []
Input Comment	feed from Safety Switch on wall
Output Type	Rear PDUS [X] Direct to Panel [] Other []
Outputs to	PDUs to multiple locations

THERMAL COLLECTION

Pictures Taken	no
Comments	no

UPS PLACEMENT		ENVIRONMENT	ENVIRONMENTAL COMMENTS
is access restricted?	NO	Room type: IT Room	Very clean, no problems
Room temperature:	71		
is the area clear?	YES		

ELECTRICIANS REPORT		
Comments on wiring, feeders, etc	Surge Suppressor ?	NO
All connections are tight and secure.		

(2) Data Collection

Primary Systems Unit

DISPLAY READINGS

	L1-N	L2-N	L1/L2
Voltage Input (VIC)	119.4	118.5	202.7
Voltage Output (VAC)	121.9	120.2	211.3
Amperage	13.4	13.4	
KVA Output	1.72	1.72	
Load %	53%		
Battery Voltage	138.6		
Battery Runtime	2h 46min		
Last Successful Self Test	10/11/2018		
Last Fault Details	XR fault 11/8/18		
Other	Battery Fault 11/7/18		

Note: after restoration of 1 bad power module, available power increased and this %load dropped

NETCARD DOWNLOADS		Model:
Comments on Event Logs	Was not able to access Netcard	
Date Correct?	y	
# of outages (last 90days)		
Comments on Data Logs	Was not able to access Netcard	
Peak Load		
Other		

(3) Cleaning/Inspections

Other Cleaning Comments

Power Modules Cleaned	Cleaned Power #1 (0701) and changed fan. Unit started working. Added 4kva to system	
Fans Replaced	Yes. To 1 bad unit	
Other Components Cleaned	Cleaned and removed dust in others	

Conditional Checks	Yes	Visually Inspect Spare frame slots for damage
	Yes	Visually Inspect Rear PDU circuit breakers
	Yes	Visually Inspect Rear Power Handling Tray
	Yes	Visually check for any moisture signs
	Yes	Visually check battery tray sockets for wear or damage
	Yes	Visually check power module sockets for wear or damage

(4) Batteries

		Comments
# total trays	10	There are a mixture of batteries. Some our APC, others are rebuilt ones with varying date codes
# detailed inspection	3	
Loose Terminals?	no	
Any Swelling or Corrosion?	no	

(5) Commentary

FOUND DURING INSPECTION

Power Handling: Power handling is good. After the power module fan was replaced, you are about 33% loaded. If one power modules fails, you still have enough power AND have an extra redundancy. This is ideal and exceptional.

Power Quality: We were not able to view the data and event logs. We did notice several faults and transfers on the LCD interface though.

Unit Condition: The unit is very clean and operating without errors or problems.

Batteries: Symmetra SYBT5 batteries trays contain a group of batteries and an intelligence board that monitors health of the battery. Most rebuilt SYBT5s have disabled this battery health monitor. This prevents the Symmetra frame from notifying you if a battery is bad. We found several obviously bad battery trays with disabled health monitors that the Frame did not detect as bad. We recommend using our rebuilt SYBT5s that have new health monitor boards installed.

Runtime: 135 minutes of runtime at current load gives you protection for minor (typically >5min), major local power outages (~40mins) and most extreme outages.

RECOMMENDATIONS

Replace the obviously bad batteries

Replace the rebuilt battery trays after 4 years to be safe

Replace batteries with new GreenLightUPS SYBT5 trays or others that have a battery health monitor