PRODUCT MANUAL

Galaxy Pulsar Plus Controller Family

Troubleshooting Table with SMNP Traps

This document supplements CC848815341 Galaxy Pulsar Plus Controller Family Product Manual r07.

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PRODUCT MANUAL

Table of Contents

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Troubleshooting Table

Product Description and Customer Services

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
AMBER	MIN, AC Fail	ne843TrapDc1Acf	None	GREEN	• Single Rectifier not receiving ac power . • AC input circuit breaker has opened. • AC input voltage is out of range. • Rectifier or AC input fuse open.	1. Verify ac power to rectifier is available. 2. Verify rectifier input circuit breaker is closed. 3. If problem not corrected, replace rectifier.
RED	MIN, AC Fail MAJ, Multiple AC Fail MAJ, Battery on Discharge	ne843TrapDc1Macf ne843TrapDc1Bda	None	GREEN	Multiple rectifiers not receiving ac power, batteries are powering load. • AC input circuit breakers have opened. • AC input voltage is out of range. • Internal rectifier fault.	1. Verify ac power to rectifiers is available. 2. Verify rectifier input circuit breakers are closed. 3. If problem not corrected, replace rectifier.
AMBER or RED	MIN, AC Fail MAJ, Multiple AC Fail	ne843TrapDc1Macf	None	GREEN	A rectifier, multiple rectifiers, or the entire system has lost AC.	1. Verify that ac power to all rectifiers is available. 2. Verify that rectifiers all report good AC 3. Issue the uninstall equipment under the operations menu for any rectifier that may have been removed during the AC fail.
RED	MAJ, Battery on Discharge	ne843TrapDc1Bda	AC OK DC OK	GREEN	Rectifier output voltage has fallen below the battery on discharge threshold set by the user.	1. If commercial ac power is present but the system voltage remains low, call your local field representative. 2. Investigate other alarms that may be present such as rectifier related problems.

[1] Display Backlight Color indicates alarm severity: Red = Critical or Major, Amber = Minor, Green = Normal.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
AMBER	MIN, Rectifier Fail (Note 1)	ne843TrapDc1Rfa ne843TrapDc1Rif ne843TrapDc1Bof ne843TrapDc1Sof	AC OK ALARM (Note 1)	GREEN	Rectifier output has dropped below 36V, rectifier has entered hiccup mode. Rectifier has an internal fault.	Replace rectifier.
RED	MAJ, Rectifier Fail	ne843TrapDc1Mfa	AC OK ALARM (Note 1)	GREEN	• Two or more rectifier outputs have dropped below 36V, and have entered hiccup mode. • Two or more rectifiers have internal faults.	1. Verify that there is no obstruction of the airflow path. 2. Reset the rectifier by removing the rectifier, waiting approximately 30 seconds, and replacing the rectifier. 3. If problem persists, replace the rectifier. 4. If problem still persists, call your local field representative.
RED	MAJ, Contactor Open (Note 1)	ne843TrapCnqCno(q is a number)	AC OK DC OK	RED	One or both of the LVD contactors is open; someone may have manually opened LVD contactor. Batteries have exceeded temperature threshold set by user.	1. Close contactors through the Control/ Operations menu. 2. Check system output voltage and LVD thresholds are correct. 3. Verify contactor and contactor control board interface connections are appropriately connected. 4. If problem still persists, call your local field representative.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
RED	MAJ, Contactor 1 Open	ne843TrapCn1Cno	AC OK DC OK	RED	One or both of the LVD contactors is open; someone may have manually opened LVD contactor. Batteries have exceeded temperature threshold set by user.	1. Close contactors through the Control/ Operations menu. 2. Check system output voltage and LVD thresholds are correct. 3. Verify contactor and contactor control board interface connections are appropriately connected. 4. If problem still persists, call your local field representative.
None	No response.	None. No response.	RED (Blinking)	RED (Blinking)	Controller failure, all devices on the communication bus reporting lossof communication with controller.	1. Check controller to ensure it is properly inserted into its slot. If so, perform the following steps: 2. Remove the controller board for 1 minute and then reset. 3. If problem persists, replace controller with new controller board. 4. If problem still persists, call your local field representative.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
AMBER	MIN, Thermal ProbeFail	ne843TrapDc1Tpa	AC OK DC OK	GREEN	Battery thermal probe failed.	1. Ensure thermal probe is properly connected to thermal probe cable and controller 2. Ensure cable is properly connected to the rear of the Distribution Module. 3. If problem persists, replace thermal probe per ensuing instructions. 4. If no thermal probe is desired make sure the Slope Thermal Compensation feature is disabled. 5. If problem still persists, call your local field representative.
RED	MAJ, Fuse Major	ne843TrapPs1Faj24 ne843TrapPs1Faj48	AC OK DC OK	RED	One or more of the output circuit breakers or fuses have opened.	Reset circuit breakers or replace fuse.
AMBER	MIN, Rectifier Fail	ne843TrapDc1Rfa	AC OK ALARM	Normal	• Single rectifier failure • Single rectifier thermal shutdown	1. Verify that there is no obstruction of the airflow path. 2. Reset the rectifier by removing the rectifier, waiting approximately 30 seconds, and replacing the rectifier. 3. If problem persists, replace the rectifier. 4. If problem still persists, call your local field representative.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
RED	MIN, Rectifier Fail MAJ, Multiple Rectifier Fail MAJ, Battery on Discharge	ne843TrapDc1Mfa ne843TrapDc1Bda	AC OK ALARM	Normal	• Multiple rectifier thermal alarm • Excessive ambient temperature • Multiple rectifier failure	1. Verify that there is no obstruction of the airflow path. 2. Reset rectifies by removing them, waiting approximately 30s and replacing them. 3. If problem persists, replace the rectifiers. 4. If problem still persists, call your local field representative.
RED	MAJ, High Voltage	ne843TrapDc1Hva	AC OK ALARM	Normal	• High output voltage from rectifier(s) • Rectifier(s) high voltage shutdown • Internal rectifier (s) failure • HV threshold set below set point value.	1. Verify/correct HV threshold greater than set point value. 2. Reset the rectifier(s) by removing the rectifier(s), waiting approximately 30s and replacing the rectifier(s). 3. If problem persists, replace the rectifier. 4. If problem still persists, call your local field representative.
Amber	MIN, Clock Battery Low	ne843TrapPs1Bbl	AC OK DC OK	Normal	Internal Lithium Battery Is Low	1. The battery is not designed to be easily field replaced. The controller unit needs to be replaced. 2. Obtain all desired information such as alarm history, statistics, and any field configuration that is different than the standard.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	MIN, Minor, Communication Fail	ne843TrapDc1Cma	RED Blinking Single rectifier or other module	GREEN	Rectifier or other module lost communication with controller.	1. If a module has been removed from an installed/ operational system, go to the Control/ Operations menu and execute Uninstall Equipment. 2. Reset the module by removing the module, waiting approximately 30 seconds, and replacing. 3. Verify/correct module to module cable. 4. If problem persists, replace the module. 5. If problem still persists, call your local field representative.
RED	MAJ, Major, Communication Fail	ne843TrapDc1Mcm	RED Blinking Single rectifier or other module	GREEN	Two or more rectifiers or other modules have lost communicationwith controller.	1. If two or more modules have been removed from an installed/operational system, go to the Control/Operations menu and execute Uninstall Equipment. 2. Reset the modules by removing the modules, waiting approximately 30 seconds, and replacing. 3. Verify/correct module to module cable. 4. If problem persists, replace the modules. 5. If problem still persists, call your local field representative.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
GREEN	No Alarm, IndividualShunt Currents displayed at or above their maximum display values (≥600A for loads, ≥800A for battery)	none	AC OK DC OK	Normal	One or both of the QS871A shuntinputs is open-circuit.	1. Verify that the respective shunt has its green and yellow wire connections attached used for the current measurements. 2. Verify the shunt connection to the QS871A is good by verifying the green and yellow wire connections from the shunt follows through to the 10-pin connector at the respective QS871A.
Amber	Fuse Minor	ne843TrapPs1Fan24 ne843TrapPs1Fan48	AC OK DC OK	Green	One or more of the protectors assigned to Fuse Minor has opened.	Replace fuse or reset breaker.
None	ACO Active	ne843TrapAco1Aac	AC OK DC OK	Green	None (Informational)	
None	Alarm Test Aborted	ne843TrapAt1Atb	AC OK DC OK	Green	None (Informational)	
None	Alarm Test Active	ne843TrapAt1Ata	AC OK DC OK	Green	None (Informational)	
RED	Auxiliary Event (event q)	ne843TrapPs1Axq (q is a number)	AC OK DC OK	Green	As event is defined	As event is defined
None	Battery Test Active	ne843TrapBr1Bta	AC OK DC OK	Green	None (Informational)	
Amber	Battery Test Failed	ne843TrapBr1Bfa	AC OK DC OK	Green	Battery test failed beforecompletion.	Call your local field representative.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
None	Clock Changed	ne843TrapPs1Clc	AC OK DC OK	Green	None (Informational)	
None	Configuration Changed	ne843TrapPs1Cch	AC OK DC OK	Green	None (Informational)	
None	Configuration Changed Reboot Required	ne843TrapPs1Crt	AC OK DC OK	Green	Controller reboot Required	Reboot controller via front panel Control/ Operations menu.
RED	Contactor Failed (contactor q)	ne843TrapCnqCnf (q is a number)	AC OK DC OK	Green	• Control board wires are incorrector disconnected • Contactor or board failure.	1.Verify/correct control board wires. 2.Replace control board. 3.If problem still persists, call your local field representative to discuss replacing contactor.
RED	Contactor Open (contactor q)	ne843TrapCnqCno (q is a number)	AC OK DC OK	Green	• One of disconnect contactor are open. • Low Voltage Disconnect (LVD) and Low Voltage Load Disconnect (LVLD) contactors open and close when configuredset points are reached.	1.Correct DC low voltage condition, if present. 2.Return contactor control switches to ON. 3.Set contactor to ON via controller. 4.If problem still persists, call your local field representative.
Amber	Converter Fail	ne843TrapCp1Cfa	AC OK DC OK	Green		Replace Converter
RED	Converter Fan Major	ne843TrapCp1Cfj	AC OK DC OK	Green		Replace Converter
Amber	Converter Fan Minor	ne843TrapCp1Cfn	AC OK DC OK	Green		Replace Converter

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
RED	Converter High Voltage Major	ne843TrapCp1Hva	AC OK DC OK	Green	One of more failed converters.	1. Replace alarmed converters. 2. If alarm persists, Read out all inverter output currents. 3. Replace all inverters with output current much higher than the average 4. If problem still persists, call your local field representative.
Amber	Converter High Voltage Minor	ne843TrapCp1Hfv	AC OK DC OK	Green	One of more failed converters.	1. Replace alarmed converters. 2. If alarm persists, Read out all inverter output currents. 3. Replace all inverters with output current much higher than the average 4. If problem still persists, call your local field representative.
Amber	Converter Input Fail	ne843TrapCp1Cin	AC OK DC OK	Green	One or more Converters not receiving DC power. • DC input circuit breaker has opened. • DC input voltage is out of range.	1. Turn on all converter DC input breakers. 2. Correct out of range DC input voltage.
RED	Converter Redundancy Loss	ne843TrapCp1Rl	AC OK DC OK	Green	Available converter capacity is not sufficient to support the load if a converter were to fail. • One or more converters is in Standby • Converter load has increased.	1. Set all converters to ON 2. Install additional converters

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
CRITRED	Converter Very Low Voltage	ne843TrapCp1Vla	AC OK DC OK	Green	Available converter capacity is not sufficient to support the load if a converter were to fail. • One or more converters is in Standby • Converter load has increased.	1. Set all converters to ON 2. Install additional converters
RED	Distribution Fail	ne843TrapCp1Dfa	AC OK DC OK	Green	Fuse or circuit breaker has open inthe integrated converter chassis.	Examine load situation Reset breaker or replace fuse.
RED	Emergency PowerOff	ne843TrapDc1Epo	AC OK DC OK	Green	Emergency Power Off external inputis asserted – external switch is in EPO mode.	Reset external EOP switch to normal.
None	Energy Management Disabled	ne843TrapDc1Emd	AC OK DC OK	Green	None (Informational)	
None	Excessive Login Attempts	ne843TrapPs1Exl	AC OK DC OK	Green	None (Informational)	
None	External PasswordReset	ne843TrapPs1Epr	AC OK DC OK	Green	None (Informational)	
RED	Generator Fail	ne843TrapGn1Gnf	AC OK DC OK	Green	Alarm received from generator	Troubleshoot generator.
RED	Generator Maintenance Required	ne843TrapGn1Gnm	AC OK DC OK	Green	Generator maintenance is due.	Perform generator maintenance.
Amber	Generator Running	ne843TrapGn1Gnr	AC OK DC OK	Green	None (Informational)	
None	Generator Start	ne843TrapGn1Gns	AC OK DC OK	Green	None (Informational)	

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	High Ambient Temperature	ne843TrapPs1Amth	AC OK DC OK	Green	• Cooling system failure • High external temperature • Ambient temp probe location improper • Temperature threshold too low	1. Verify/repair cooling system. 2. Verify/correct ambient temp threshold and probe operation. 3. Verify probe location.
Amber	High Battery Temperature	ne843TrapBr1Btha	AC OK DC OK	Green	Excessive float current due to defective battery.	Troubleshoot batteries.
Amber	High Float Voltage	ne843TrapDc1Hfv	AC OK DC OK	Green	One of more rectifiers not regulating and load sharing.	Replace rectifiers operating at much higher current than the others.
None	History Cleared	ne843TrapPs1Hcl	AC OK DC OK	Green	None (Informational)	
RED	ID Conflict	ne843TrapDc1Did	AC OK DC OK	Green	Two or more rectifier shelves havethe same (non-unique) IDs.	Set ID switches on all rectifier shelves so that each shelf has a unique ID.
RED	ID Conflict	ne843TrapCp1Did	AC OK DC OK	Green	Two or more converter shelves have the same (non-unique) IDs.	Set ID switches on all converter shelves so that each shelf has a unique ID.
RED	ID Not Configured	ne843TrapDc1Zid	AC OK DC OK	Green	One or more power units have thesame unconfigured IDs.	Configure IDs on all connected units at the shelf or module as appropriate.
RED	Imminent Shutdown	ne843TrapBr1Isda	AC OK DC OK	Green	Rectifiers or converters are about toturn OFF due to low input voltage (Informational).	None required.
Amber	Incompatible Converter Alarm	ne843TrapCp1Icc	AC OK DC OK	Green	One or more installed converters are not compatible with the system. Converter is not same output voltage.	Replace incompatible converters with compatible converters.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	Incompatible Rectifier	ne843TrapDc1Icr	AC OK DC OK	Green	One or more installed rectifiers are not compatible with the system. Rectifier is not same output voltage.	Replace incompatible rectifiers with compatible rectifiers with the same output voltage.
RED	Inverter Distribution Alarm	ne843TrapIvp1Ida	AC OK DC OK	Green	One or more of the inverter AC distribution circuit breakers have opened.	Reset circuit breakers.
RED	Inverter Fail	ne843TrapIvp1If	AC OK DC OK	Green	Inverter failed.	Replace inverter
RED	Inverter FrequencyLock	ne843TrapIvp1Ifa	AC OK DC OK	Green	Inverters unable to synchronize with AC mains.	Call your local field representative.
Amber	Inverter High CrestFactor	ne843TrapIvp1Icf	AC OK DC OK	Green	Inverter high output crest factordue to • Insufficient inverters for non-linear inverter load. • Defective inverter.	1. Read out and note crest factor 2. Add an inverter. 3. Read out crest factor. 4. If crest factor is reduced, continue adding inverters until alarm no longer occurs. 5. If crest factor is not reduced, replace inverters one at a time until crest factor is reduced. Last inverter removed is defective. 6. If problem still persists, call your local field representative.
RED	Inverter High Input	ne843TrapIvp1Ihvi	AC OK DC OK	Green	High inverter DC input voltage.	Trouble shoot inverter DC input voltage.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
RED	Inverter High Output	ne843TraplvplIhv	AC OK DC OK	Green	One or more failed inverters.	1. Read out all inverter output currents. 2. Replace all inverters with output current much higher than the average 3. If problem still persists, call your local field representative.
Amber	Inverter High Peak Current	ne843TraplvplIipk	AC OK DC OK	Green	Inverter high output peak currentdue to • Insufficient inverters for non-linear inverter load. • Defective inverter.	5. Read out and note peak current 6. Add an inverter. 7. Read out crest factor. 8. If peak current is reduced, continue adding inverters until alarm no longer occurs. If peak current is not reduced, replace inverters one at a time until crest factor is reduced. Last inverter removed is defective. If problem still persists, call your local field representative.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	Inverter High RMSCurrent	ne843TrapIvp1Iirm	AC OK DC OK	Green	Inverter high output RMS currentdue to • Insufficient inverters for non-linear inverter load. • Defective inverter.	1. Read out and note RMS current 2. Add an inverter. 3. Read out crest factor. 4. If RMS current is reduced, continue adding inverters until alarm no longer occurs. If RMS current is not reduced, replace inverters one at a time until crest factor is reduced. Last inverter removed is defective. 1. If problem still persists, call your local field representative.
RED	Inverter High Temperature	ne843TrapIvp1Ita	AC OK DC OK	Green	• Blocked inverter vents • High ambient temperature • Defective inverter	1. Clear inverter vents 2. Reduce ambient temperature 3. Replace defective inverter
RED	Inverter ID Conflict	ne843TrapIvp1Idid	AC OK DC OK	Green	Two or more inverters have thesame (non-unique) IDs.	Set inverter IDs on all inverters so that each shelf has a unique ID.
Amber	Inverter Low Input	ne843TrapIvp1Ilvi	AC OK DC OK	Green	• Low DC source voltage • High voltage drop in input cables	Trouble shoot inverter DC input voltage.
Amber	Inverter Low Output	ne843TrapIvp1Illv	AC OK DC OK	Green	Load exceeds inverter capacity	Add inverters.
RED	Inverter Output Fuse	ne843TrapIvp1Iof	AC OK DC OK	Green	Failed inverter.	Replace inverter.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	Inverter RedundancyLoss	ne843TrapIvp1Irls	AC OK DC OK	Green	Available inverter capacity is not sufficient to support the load if ainverter were to fail. • One or more inverters is in Standby • Inverter load has increased.	1. Set all inverters to ON 2. Install additional inverters
Amber	Load Share Fail	ne843TrapDc1Lsf	AC OK DC OK	Green	One or more rectifiers' output current is not near the average.	1. Remove and reinstall rectifier. 2. If problem still persists, replace rectifier.
Amber	Low Ambient Temperature	ne843TrapPs1Amtl	AC OK DC OK	Green	• Heating system failure • Low external temperature • Ambient temp probe location improper • Temperature threshold too high	1. Verify/repair heating system. 2. Verify ambient temp threshold. 3. Verify/correct probe location.
None	Low Battery Temperature	ne843TrapBr1Btla	AC OK DC OK	Green	(Informational)	
Amber	Manual Off	ne843TrapDc1Man	AC OK DC OK	Green	One rectifier is manually held off (standby).	Set the rectifier to ON
Amber	Memory Backup Battery Low	ne843TrapPs1Bbl	AC OK DC OK	Green	On-board memory battery/RTCnear end of life.	Replace battery with exact battery module. Consult technical support for part needed.
RED	Multiple ConverterFail	ne843TrapCp1Mfa	AC OK DC OK	Green	• Multiple converter thermal alarm • Obstruction of airflow path. • Excessive ambient temperature • Multiple converter failure	1. Remove obstructions of the airflow path. 2. Reset converters by removing them, waiting approximately 30s and replacing them. 3. If problem persists, replace the converters. 4. If problem still persists, call your local field representative.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
RED	Multiple Converter Fail	ne843TrapCp1Mfa	AC OK DC OK	Green	• Multiple converter thermal alarm • Obstruction of airflow path. • Excessive ambient temperature • Multiple converter failure	1. Remove obstructions of the airflow path. 2. Reset converters by removing them, waiting approximately 30s and replacing them. 3. If problem persists, replace the converters. 4. If problem still persists, call your local field representative.
RED	Multiple Inverter Fail	ne843TrapIvp1Mif	AC OK DC OK	Green	Multiple inverter thermal alarm Obstruction of airflow path. Excessive ambient temperature Multiple inverter failure	1. Remove obstructions of the airflow path. 2. Reset inverters by removing them, waiting approximately 30s and replacing them. 3. If problem persists, replace the inverters. 4. If problem still persists, call your local field representative.
RED	Multiple Manual Off	ne843TrapDc1Mman	AC OK DC OK	Green	One or more rectifiers is manuallyheld off (standby).	Set the rectifiers to ON
None	Number Did Not Respond	ne843TrapCm1Cor	AC OK DC OK	Green	Modem dialed number did not answer.	1. Verify/correct configured number. 2. Verify/repair phone line connection.
None	Number Did Not Respond	ne843TrapPo1Por	AC OK DC OK	Green	Modem dialed number did not answer.	1. Verify/correct configured number. 2. Verify/repair phone line connection.
None	Number Not Configured	ne843TrapCm1Nnc	AC OK DC OK	Green	Modem periodic dialed number not configured.	Verify and configure number.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
RED	Open String	ne843TrapDc1Osa	AC OK DC OK	Green	One of more battery strings are disconnected via contactor, switch, breaker, or fuse.	1. Return switch or breaker to ON. 2. Replace fuse. 3. Return contactor control switches to ON. 4. Set contactor to ON via controller. 5. If problem still persists, call your local field representative.
None	Passwords At Default	ne843TrapPs1Pfd	AC OK DC OK	Green	None (informational)	
RED	Probe Minimum Fail	ne843TrapDc1Pmf	AC OK DC OK	Green	Ambient temp probe failed or disconnected.	1. Verify at least 2 ambient temp probes. 2. Verify/repair probe connections. 3. Replace suspect probe.
RED	Program Line Invalid	ne843TrapPs1Pgi	AC OK DC OK	Green	User defined event or parameter isinvalid.	Correct program line.
RED	Queue Overflow	ne843TrapCm1Cof	AC OK DC OK	Green	Controller program execution error.	1. Cycle power to controller. 2. If problem still persists, replace controller.
None	Real-time ReserveTime Low	ne843TrapDc1Rrtl	AC OK DC OK	Green	Battery reserve time is low during a discharge. (informational)	1. Verify/correct battery settings. 2. Verify reserve time vs load. 3. Check battery.
None	Rectifier Current Limit	ne843TrapDc1Clm	AC OK DC OK	Green	One or more rectifiers are in currentlimit. (informational)	1. Verify sufficient rectifier capacity for load and battery recharge. 2. Rectifier current limit is normal during battery recharge.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	Rectifier Fan Failure	ne843TrapDc1Rfn	AC OK DC OK	Green	Rectifier fan failed.	Replace rectifier.
Amber	Rectifier Internal Fault	ne843TrapDc1Rif	Alarm		Rectifier output has dropped below 36V, rectifier has entered hiccup mode. Rectifier has an internal fault.	Replace rectifier.
Amber	Rectifier ORing FETFault	ne843TrapDc1Bof	Alarm		Rectifier ORing FET fault	Replace rectifier.
Amber	Rectifier Shorted ORing FET	ne843TrapDc1Sof	Alarm		Rectifier ORing FET fault	Replace rectifier.
Amber	Rectifier Under Voltage	ne843TrapDc1Der	Alarm		Output of rectifier internally forcedlow.	Replace rectifier.
Amber	Redundancy Loss	ne843TrapDc1Rls	AC OK DC OK	Green	• Available rectifier capacity is not sufficient to support the load if arectifier were to fail per configured redundancy loss threshold. • Rectifier load has increased. • One or more rectifiers are in standby.	1. Set all rectifiers to ON. 2. Install additional rectifiers. 3. Verify/correct configured redundancy loss threshold.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
None	Reserve Time Low	ne843TrapDc1Rtl	AC OK DC OK	Green	Battery reserve time is low on float. (informational)	1.Verify/correct battery configuration. 2.Verify reserve capacity vs. load 3.Check batteries.
RED	Reverse Battery	ne843TrapBr1Rba	AC OK DC OK	Green	Battery polarity is reversed.	Correct polarity of battery connections.
Amber	Ringer Fan Fail	ne843TrapRp1Rpff	AC OK DC OK	Green	Ringer fan fail.	Replace fan.
RED	Ringer ID Conflict	ne843TrapRp1Rcdp	AC OK DC OK	Green	Two or more ringer modules havethe same (non-unique) IDs.	Set IDs switches on all ringer modules so that each has a unique ID.
RED	Ringer Major ExternalFault	ne843TrapRp1Rpxj	AC OK DC OK	Green	Short or overload on ringer output.	Clear short or overload.
RED	Ringer Major Fail	ne843TrapRp1Rpfj	AC OK DC OK	Green	Ringer module fail.	Replace ringer module.
Amber	Ringer Minor ExternalFault	ne843TrapRp1Rpxn	AC OK DC OK	Green	Overload on ringer output.	Clear overload.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	Ringer Minor Fail	ne843TrapRp1Rf	AC OK DC OK	Green	Ringer failed, but ringing output continues to function satisfactorily.	Replace ringer module.
Amber	Ringer Redundancy Loss	ne843TrapRp1Rprl	AC OK DC OK	Green	• Available ringer capacity is not sufficient to support the load if a ringer were to fail. • One or more ringers has failed • Ringer load has increased.	1. Rebalance ringer loads. 2. Install additional ringer.
Amber	Self Test Failed	ne843TrapPs1Stf	AC OK DC OK	Green	Controller self test failed.	Replace controller.
Amber	Sense/Control Fuse	ne843TrapDc1Vsf	AC OK DC OK	Green	Sense or control fuse failed.	1. Replace sense or control fuse. 2. Verify remote sense wires are connected to appropriate points.
Amber	Shorted Cell Detected	ne843TrapBr1Scda	AC OK DC OK	Green	Shorted battery cell detected. Battery Probe not placed in proper location in the string.	1. Verify/repair connections. 2. Check batteries. 3. Generally, all cells in a string should be replaced together.
RED	Thermal Probe Fail Safe	ne843TrapDc1Pfs	AC OK DC OK	Green	Battery thermal probe • disconnected • failed	1. Verify/repair probe connections 2. Verify number of probes matches settings 3. Update Equipment – Controller menu 4. Replace probe and verify system output voltage returns to normal set-point.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
As user defined	This may be a userdefined event, or anew controller event.	ne843TrapUserDefined	AC OK DC OK	Green	As user defined	As user defined
None	Very High Battery Temperature	ne843TrapBr1Btvh	AC OK DC OK	Green	Battery temperature is very high (informational)	
None	Very Low Battery Temperature	ne843TrapBr1Btvl	AC OK DC OK	Green	Battery temperature is very low (informational)	
RED	Very Low Voltage	ne843TrapDc1Vla	AC OK DC OK	Green	DC voltage is almost too low tooperate equipment. • Battery on discharge • Available rectifier capacity notsufficient • Alarm threshold configuredabove set point	1. Restore AC power 2. Bring generator on -line. 3. Connect fresh batteries. 4. Install more rectifiers. 5. Verify output voltage and alarm threshold.
RED	Voltage Duplicate ID	ne843TrapBr1Mdp	AC OK DC OK	Green	Two ES771 modules have same ID	Change ID settings so that modules have unique, non-zero values.
RED	Voltage ID Not Configured	ne843TrapBr1Mzd	AC OK DC OK	Green	ID not set on ES771.	Set IDs to unique, non-zero values.

Display Backlight Color[1]	User Interface Display	SNMP Trap	Rectifier LED	Distribution Module Board LED	Possible Problem(s)	Possible Solution(s)
Amber	Voltage Module Fail	ne843TrapDc1Vmf	AC OK DC OK	Green	• ES771 failure • ES771 disconnected	1. Verify ES771 connections. 2. Verify/replace ES771.

Table 1 Infinity NE System Troubleshooting

Note 1: While in hiccup mode, the rectifier will attempt to restart every 10 seconds for a maximum of 3 times.
Note 2: Refer to Section 5, LVD board Removal for removal details. Note that the power system will continue to power the load while the LVD board is out of the system; however, there will be no possibility of battery backup until the LVD board is replaced.

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