

NetSure[™] -48 VDC to -58 VDC Output Converter Upgrade Kit

Installation Manual

Kit Specification Number: 60028017 For Use in Spec. Nos. 582127000100, 582127000101, 582127000102, 582127000103, 582127000203 Power Systems The information contained in this document is subject to change without notice and may not be suitable for all applications. While every precaution has been taken to ensure the accuracy and completeness of this document, Vertiv assumes no responsibility and disclaims all liability for damages resulting from use of this information or for any errors or omissions. Refer to other local practices or building codes as applicable for the correct methods, tools, and materials to be used in performing procedures not specifically described in this document.

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Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures.

Visit https://www.vertiv.com/en-us/support/ for additional assistance.

TABLE OF CONTENTS

Ad	monishr	nents Used in this Document	iv
Im	portant	Safety Instructions	v
Saf	ety Admo	onishments Definitions	V
Saf	ety and F	Regulatory Statements	V
Dé	clarations	de Sécurité et de Réglementation	V
1	Vertiv™	' NetSure™ -48 VDC to -58 VDC Converter Upgrade Kit Installation Instructions	1
1.1	Kit Des	cription	1
1.2	Restrict	ions	1
1.3	Kit Con	tents	1
1.4	Tools a	nd Material Required	2
1.5	Installat	ion Procedure	2
1.6	Backing	Up the NCU Configuration	
	1.6.1	NCU Version 1.1.80, or Later	
	1.6.2	NCU Version 1.1.70, or Earlier	17
1.7	Reloadi	ng a Backed-Up NCU Configuration	
	1.7.1	NCU Version 1.1.80, or Later	
	1.7.2	NCU Version 1.1.70, or Earlier	

Admonishments Used in this Document



DANGER! Warns of a hazard the reader *will* be exposed to that will *likely* result in death or serious injury if not avoided. (ANSI, OSHA)



WARNING! Warns of a potential hazard the reader **may** be exposed to that **could** result in death or serious injury if not avoided. This admonition is not used for situations that pose a risk only to equipment, software, data, or service. (ANSI)



CAUTION! Warns of a potential hazard the reader **may** be exposed to that **could** result in minor or moderate injury if not avoided. (ANSI, OSHA) This admonition is not used for situations that pose a risk only to equipment, data, or service, even if such use appears to be permitted in some of the applicable standards. (OSHA)



ALERT! Alerts the reader to an action that **must be avoided** in order to protect equipment, software, data, or service. (ISO)



ALERT! Alerts the reader to an action that *must be performed* in order to prevent equipment damage, software corruption, data loss, or service interruption. (ISO)



FIRE SAFETY! Informs the reader of fire safety information, reminders, precautions, or policies, or of the locations of fire-fighting and fire-safety equipment. (ISO)



SAFETY! Informs the reader of general safety information, reminders, precautions, or policies not related to a particular source of hazard or to fire safety. (ISO, ANSI, OSHA)

Important Safety Instructions

Safety Admonishments Definitions

Definitions of the safety admonishments used in this document are listed under "Admonishments Used in this Document" on page iv.

Safety and Regulatory Statements

Refer to Section 4154 (provided with your customer documentation) for Safety and Regulatory Statements.

Déclarations de Sécurité et de Réglementation

Reportez-vous à la Section 4154 (fourni avec les documents de votre client) pour les déclarations de sécurité et de réglementation.

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1 Vertiv[™] NetSure[™] -48 VDC to -58 VDC Converter Upgrade Kit Installation Instructions

1.1 Kit Description

These instructions provide a step-by-step procedure to field install this kit into Vertiv[™] NetSure[™] 7100 Power Systems (Spec. Nos. 582127000100, 582127000101, 582127000102, 582127000103, 582127000203). Installation of this kit in other equipment should not be attempted.

This kit provides components to change converter module mounting positions for Spec. No. 1C48241500 (-48 VDC to +24 VDC) converter modules to mounting positions for Spec. No. 1C48582000P3 (-48 VDC to -58 VDC) converter modules. It also provides components to change the breaker positions in the distribution cabinet from +24 VDC to -58 VDC. A backout procedure is also provided.

1.2 Restrictions

You MUST have an NCU Controller in your system to use the Spec. No. 1C48582000P3 (-48 VDC to -58 VDC) converter modules.

1.3 Kit Contents

Table 1.1 lists the items furnished as a part of this kit. Before installing the kit, check the items furnished against those listed to ensure that there are no shortages.

P/N	Description	Qty.
60028735	Use Only -58 VDC Converters Caution Label	9
10019532	Critical Load Distribution Position Label (4-Position)	5
10019557	Critical Load Distribution Position Label (6-Position)	1
534800	Plug Button	5
60027373	Rectifier/-58 VDC Converter Module Mounting Positions Label	1
60027892	Field Retrofitted for Use with -58 VDC Converters Nameplate Label	1
245126200	Quick Connect Terminal	1
60027756	Fuse Alarm Jumper Harness	1
237650200	Cable Tie	6
552423	Hook-and-Loop Fastener (factory attached to storage pouch)	2
150661	USB Memory Device with Storage Pouch (contains new NCU configuration, NCU Clean-up package, and customer documentation)	1

Table 1.1 Kit Contents

1.4 Tools and Material Required

Table 1.2 lists the items required to install this kit.

Table 1.2 Tools and Material Required

Description
7/16" Socket
Small Flat-Blade Screwdriver
#2 Phillips Screwdriver
Torque Wrench
Spec. No. 1C48582000P3 (-48 VDC to -58 VDC) Converter Modules (as required)

1.5 Installation Procedure

THESE INSTRUCTIONS SHOULD BE READ THROUGH COMPLETELY BEFORE INSTALLING THE KIT.

The following is a step-by-step procedure to install the kit. The procedure has been written for ease of use and to minimize the possibility of contact with potentially hazardous energy. This procedure should be performed in the sequence given, and each step should be completely read and fully understood before performing that step. Observe all "Important Safety Instructions" starting on page v and also those presented in the following procedure. As each step of the procedure is completed, the box adjacent to the respective step should be checked. This will minimize the possibility of inadvertently skipping any steps. If the step is not required to be performed for your site, also check the box to indicate that it was read.

Procedure



DANGER! This procedure is performed on a LIVE system. Observe the "Important Safety Instructions" starting on page v and those listed in the power system manual.

- [] 1. Performing this procedure may activate external alarms. Do one of the following. If possible, disable these alarms. If these alarms cannot be easily disabled, notify the appropriate personnel to disregard any future alarms associated with this system while the procedure is being performed.
- [] 2. If your system has an ACU+ controller, replace it with an NCU controller (P/N 1M830DNA562919).
- [] 3. If your system ORIGINALLY had an NCU controller, refer to "Backing Up the NCU Configuration" on page 16 and backup the controller configuration.
- [] 4. Open the distribution cabinet door. Ensure that there are no loads/cables connected to the +24V circuit breaker positions. Upon completion of this upgrade, the system will no longer support +24V loads. If there are loads tied to the +24V positions, these will need to be removed and connected to a separate +24V system.
- [] 5. Remove all existing +24 VDC output converter modules from the module mounting shelves.
- [] 6. Clear the converter Communication and/or Lost alarms via the controller, if applicable. Via the controller front panel main screen, navigate to the Settings Icon in the upper left of the main screen and press the ENT key. Enter your username and password. Use the arrow keys to scroll to the Alarm Settings Menu and press the ENT key. Use the arrow keys to scroll to the ClrAllConvCommF and press the ENT key. Use the arrow keys to scroll to the ClrConvCommFail and press the ENT key. Use the arrow keys to scroll to the Clear Conv Lost and press the ENT key.
- [] 7. Adhere kit supplied "Use Only -58 VDC Converters" caution label (60028735) to each of the nine (9) module mounting slots shown in Figure 1.1. Orient the labels between the two (2) rectangular slots used for the converter module locking tabs. Align front edge of label to front edge of shelf. **Do Not** cover the converter module locking tab slots.

Figure 1.1 Adhere 60028735 Labels



- [] 8. Open the distribution cabinet front door.
- [] 9. Remove the shield from the top distribution panel by loosening the screws securing it and lifting the shield up and out (see Figure 1.2).

Sheld

- [] 10. Remove the plug buttons securing the +24 VDC distribution position labels located on the top distribution panel. Save the plug buttons after removing them as they will be needed in later steps. Remove the labels. See Figure 1.3. Save these +24 VDC distribution position labels in case the system needs to be converted back for use with +24 VDC output converters.
- [] 11. Install kit supplied "Critical" load distribution position labels (10019532) in the places the +24 VDC labels were removed from. Orient so the -58V side is visible. Secure the labels with the plug buttons previously removed. See Figure 1.3.

Figure 1.2 Remove Shield

- [] 12. Remove the plug buttons securing the -48 VDC distribution position label located on the top distribution panel. Save the plug buttons after removing them as they will be needed in later steps. Remove the label. See Figure 1.3. Save this -48 VDC distribution position label in case the system needs to be converted back for use with +24 VDC output converters.
- [] 13. Install kit supplied "Critical" load distribution position label (10019557) in the place the -48 VDC label was removed. Orient so the -48V side is visible. Secure the label with the plug buttons previously removed. See Figure 1.3.



Figure 1.3 Install 10019532 and 10019557 Labels

[] 14. Replace the top distribution panel shield.

[] 15. Adhere kit supplied module position label (60027373) over the existing module position label. See Figure 1.4.

Figure 1.4 Adhere 60027373 Label



[] 16. Adhere kit supplied nameplate label (60027892) above the existing nameplate label. See Figure 1.5.





[] 17. Install kit supplied quick connect terminal (245126200) to return busbar on ANY distribution panel. Figure 1.6 shows the quick connect terminal attached to the lower distribution panel for reference. Install using the existing 1/4-20 bolt and hardware. Re-torque the 1/4-20 bolt to 84 in-lbs.

Figure 1.6 Installing Quick Connect Terminal



- [] 18. Remove the shield from the control shelf located at the bottom of the distribution cabinet. See Figure 1.7.
- [] 19. Disconnect the existing system wire harness from J4 on the system interface board. See Figure 1.7.

Figure 1.7 Disconnecting Existing System Wire Harness



- [] 20. Install kit supplied fuse alarm jumper harness (60027756). See Figure 1.8 and Figure 1.9.
 - a) Connect the fuse alarm jumper harness RED (R) wire to the IB2-1 controller interface board terminal J4-5 (DI6-). See Figure 1.8.
 - b) Connect the fuse alarm jumper harness BLACK (BK) wire to the IB2-1 controller interface board terminal J4-6 (DI6+). See Figure 1.8.
 - c) Connect the fuse alarm jumper harness to the quick connect terminal previously installed on ANY distribution panel return busbar. Figure 1.9 shows the quick connect terminal on lower panel for reference.
 - Route the fuse alarm jumper harness from the quick connect terminal block down to the system interface board. See Figure 1.9.
 - e) Plug the mating connector of the fuse alarm jumper harness into J4 on the system interface board. See Figure 1.9.
 - f) Plug the remaining connector on the fuse alarm jumper harness into the mating connector of the existing system wire harness (previously disconnected from J4 on system interface board in a previous step). See Figure 1.9.

[BK] RTN +24 VDC -58 VDC \bigcirc \bigcirc O O 20 8 ______ ZL⊃⊢ø Z L D TEMP1 TEMP1 2202 2202 202 288 0000 0000 00 TEMP2 TEMP2 0000000000 00 0 0 C C ╎물 9 물일 9 모모 9 9 000000000 0000000000000 0000000000 0000000000000 000000000 0000000000000 0000000000 0 \cap Ο Ο -58V FA [R]

Figure 1.8 IB2-1 Controller Interface Board

Figure 1.9 Installing Fuse Alarm Jumper Harness







[] 23. Update the controller configuration file as follows.

NOTE! When using the Web interface to update an NCU containing firmware that is revision level 1.2.51B or less to version 1.2.60B or greater, the NCU requires its flash memory to be refreshed. The Clean-up Tool package frees enough flash so that the controller can be updated to 1.2.60B or greater while maintaining the Web user interface.

Starting with version 1.2.60B and later, software is loaded using a different strategy, so this clean-up process is not needed once a controller is updated to 1.2.60B. See the main page (Figure 1.10) to determine software version.

- a) Copy the Application "All" package file and the Clean-up Tool package (ncu_cleanup_V1.1.tar or later) located on the kit-supplied USB drive to your computer. The name of the Application "All" package file ends in either .tar or .tar.gz. The name of the Clean-up Tool package ends in .tar.
- b) Log in to the Web user interface page.
- c) Click "Advanced Settings." See Figure 1.10.

Figure 1.10 Advanced Settings



d) Go to the SW Maintenance tab. Click on "Stop Controller." See Figure 1.11.

Figure 1.11 Stop Controller

	13 All Alarms(2) 🕰 Observation(0) 🕰 Major(0) 😗 Critical(2) 🔀 Auto Popup	& Welcome: admin SIGN OUT
NetS		
Home Settings	Ethernet Users SMMP Language SW Maintenance Alarms Di Alarms Di Alarms DO(relays) Shunts Fuses Alarm Report Generator Power Auto Config This function will automatically configure SM units and motibus devices that have been connected to RS485 bus. Auto Config Restore Factory Defaults Restore Defaults Restore Defaults Restore Defaults Restore Defaults	Sgilt Monitor Protocol Clear Data System Status Output Vottage Output Current 0.0A System Specifications System Name NCU
History Log System Inventory	Retrieve Diagnostics Package Retrieve Diagnostics Package Retrieve a diagnostics package to help troubleshoot controller issues Retrieve File II Upload/Download Retrieve File	Controller Specifications Product Model M830D Serial Number 03221000021 Hardware Version A20 Software Version 1.2.408
Advanced Settlings	Upload/Download needs to stop the Controller. Do you want to stop the Controller? Stop Controller	Config Version 1.01 Site Information Site Name 0.3 Site Location Europe
22/02/2024 17:26	130	©2021 Vertiv Tech Co.,Ltd.All rights reserved.

e) After the following window opens, click "OK." See Figure 1.12.

Figure 1.12 Upload/Download- Controller Stopped

	Ethernet		s SNMP	Language	SW Maintenance	Alarms	DI Alarms	DO(relay)			Alarm Report	Power Split	Monitor Prote
-	Upload/	Downlo	ad File										
	Caution: Or abnormally	nly the fi . You mi	le SettingPa ust hit the ST	ram.run or file FART CONTR	s with extension .tar o OLLER button before	or .tar.gz ca leaving thi	in be downloa s screen.	ded. If the do	wnloaded	īle is NO	T correct, the Co	ntroller will run	
S	elect File				Bro	wse	Download	o Controller					
Fi	le in contr	oller	Configu	ration Pa Cor	troller was stopped s	uccessfully	. You can upl	oad/download	l the file.	ОК			
	Start Co	ontroller											
						St	art Controller						
													Þ



ALERT! Never navigate away from this Web page without first clicking on "Start Controller" after loading the appropriate file(s). If you do, you will not have Web access. A manual system reset is required to restore Web access.

NOTE! If the original software version is 1.2.60B or higher, go to step k.

f) After the following window appears (Figure 1.13), browse and select the Clean-up Tool package (ncu_cleanup_V1.1.tar or later) you copied earlier to your computer. Click "Download to Controller." This process may take several minutes. The following screen displays, indicating a successful upload. Click "OK" and then click "Start Controller" to reboot the NCU. This process could take several minutes.

Figure 1.13 Download Clean-Up Tool Package and Start Controller

👩 Ali Aliantia (2) 🔥 Ottoervation (2) 🔥 Major (2) 🔮 Ottoea (2) 🦉 Auto Papup	
NetSure [™] control unit	
Image: Section 2 Entropy Users SMM2 Language SMM Methemates Aurons DDQ ways) Starts Paters Auron Report Oursesto Paters Section 2 Image: Section 2 Image: SMM2 Language SMM Methemates Aurons DDQ ways) Starts Paters Auron Report Oursesto Paters Section 2 Image: Section 2 Image: SMM2 Language SMM Methemates Aurons DDQ ways) Starts Paters Aurons DDQ ways Starts Paters Aurons Aur	Mandor Protocol Clear Data System Status Output Vallage Output Clearert Output Outpu
29/02/2024 16:37:56	62021 Verter Tech Col (Ltd.Al) rights reserved.

- g) Log in to the Web user interface page.
- h) Click "Advanced Settings." See Figure 1.14.

Figure 1.14 Advanced Settings



i) Go to the SW Maintenance tab. Click on "Stop Controller." See Figure 1.15.

Figure 1.15 Stop Controller

	🔯 All Alarms(2) 🛆 Observation(0). 🕰 Major(0) 🕕 Critical(2) 🥃 Auto Popup	A Welcome: admin SIGN OUT
Nets		
ft Home	C Ethernet Users SNMP Language SW Maintenance Alarms DI Alarms DO(relays) Shunts Fuses Alarm Report Generator Power H Auto Config	Split Monitor Protocol Clear Data System Status
æ	This function will automatically configure SM units and mostbus devices that have been connected to RS485 bus. Auto Config If Restore Factory Defaults	Output Voltage Output Current 0.0A
Settings	Restore default configuration? The system will reboot. Restore Defaults Reboot controller If Retrieve SettingParam.tar	System Specifications System Name NCU
History Log	Retrieve the current settings of the controller's adjustable parameters.	Controller Specifications Product Model M8300
System	Retrieve a diagnostics package to help troubleshoot controller issues Retrieve Allagnostics package to help troubleshoot controller issues	Serial Number 03221000021 Hardware Version A20 Software Version 1 2.408
ŧ	Lipioad/Download Upload/Download Upload/Download needs to stop the Controller. Do you want to stop the Controller? Stop Controller?	Config Version 1.01 Site Information
Advanced Settings		Site Name G3 Site Location Europe
22/02/2024 17:20	5:30	©2021 Vertiv Tech Co.,Ltd.All rights reserved.

j) After the following window opens, click "OK." See Figure 1.16.

Figure 1.16 Upload/Download – Controller Stopped

	Etherne		Users	SNMP	Language	SW Maintenance	Alarms	DI Alarms	DO(relay)			Alarm Report	Power Split	Monitor Pro
	II Upload	l/Dov	vnload	File										
	Caution: C abnormally	Only t y. Yo	he file u must	SettingPar hit the ST	am.run or fil ART CONTI	es with extension .tar (ROLLER button before	or .tar.gz ca leaving thi	an be downloa is screen.	ided. If the do	wnloaded t	iile is NO	T correct, the Co	ntroller will run	
s	elect File			_	_	Bro	owse	Download	to Controller					
F	ile in cont	rolle	r	Configu	ration F a Co	ontroller was stopped s	uccessfully	r. You can upl	oad/download	I the file.	ОК			
	🛿 Start C	ontr	oller											
							St	tart Controller						

ALERT! Never navigate away from this Web page without first clicking on "Start Controller" after loading the appropriate files. If you do, you will not have Web access. A manual system reset is required to restore Web access.

k) After the following window appears (Figure 1.17), browse and navigate to the folder where the file to download is located. Select the application "All" package you copied earlier to your computer. Click "Download to Controller." This process may take several minutes. The following screen displays, indicating a successful upload. Click "OK" and then click "Start Controller" to reboot the NCU with the downloaded file installed. This process could take several minutes.

<page-header> Returned Returne

Figure 1.17 Download Firmware Package and Start Controller

NOTE! If a V1.260B or greater package file is downloaded in the previous steps to a revision 1.2.51B or less revision controller before using the Clean-up tool, one of the following error messages will display:

Figure 1.18 Error Message 1: "Failed to download file or wrong package type."



OR

Figure 1.19 Error Message 2: "Failed to download file."

	E Ali	darms(3) A Observation(0)	A Major(0) (1) Critical(3)	🛃 Auto Popup	A Welcome:	admin SIGN OUT
Net						
A	C Ethernet Users SNMP Language SW Maintenance Alarms DI Ala					
Home	11 Upload/Download File				System Status	
	Caution: Only the file SettingParam.run or files with extension .tar or .tar.gz can be dow					
÷\$	abrommaly. You must ne be START CONTROLLER button before leaving this screen.				Output Current	
Settings	Select File C.Makepath/app_V1.2.608P29Combo Reveal	and to Postoline			System Specification	ons
G	File in controller Configuration Package	e. OK			Controller Specific	ations
History Log	II Start Controller					
	Start Cont	oller				
Inventory					Software Version	
Advanced					Site Information	
Settings						

- [] 24. If your system ORIGINALLY had an NCU controller, refer to "Reloading a Backed-Up NCU Configuration" on page 19 and restore the backed-up controller configuration file saved in step [] 3.
- [] 25. Close the distribution cabinet front door.
- [] 26. Install separately ordered converter modules 1C48582000P3 in the far right mounting positions shown in Figure 1.1 and Figure 1.4, as required.
- [] 27. Click on the converter icon in the NCU WEB interface power system status block diagram. This brings up the converter group status page. Check the converter output voltage and the status of each converter installed to verify all converters installed are active.
- [] 28. Enable the external alarms or notify appropriate personnel that this procedure is finished.
- [] 29. Ensure that there are no local or remote alarms active on the system.
- [] 30. If your system ORIGINALLY had an ACU+ controller, refer to "Backing Up the NCU Configuration" on page 16 and backup the controller configuration. Save this configuration file in case the NCU configuration ever needs to be reloaded.
- [] 31. Save these instructions in case a backout procedure needs to be performed at a later date.

Backout Procedure

If the power system needs to revert back to -48V/+24V operation, perform the following procedure.

- [] 1. Performing this procedure may activate external alarms. Do one of the following. If possible, disable these alarms. If these alarms cannot be easily disabled, notify the appropriate personnel to disregard any future alarms associated with this system while the procedure is being performed.
- [] 2. Remove all existing -58 VDC output converter modules from the module mounting shelves.
- [] 3. Remove the "Use Only -58 VDC Converters" caution labels (60028735).
- [] 4. Open the distribution cabinet front door.
- [] 5. Remove the shield from the top distribution panel.
- [] 6. Remove the plug buttons securing the -58 VDC distribution position labels located on the top distribution panel. Save the plug buttons after removing them as they will be needed in later steps. Remove the labels.
- [] 7. Install the saved "+24 VDC" distribution position labels in the places the -58 VDC labels were removed from. Secure the labels with the plug buttons previously removed.
- [] 8. Replace the shield to the top distribution panel.
- [] 9. Remove the kit supplied module position label (60027373).
- [] 10. Remove the kit supplied nameplate label (60027892).
- [] 11. Remove the shield from the control shelf located at the bottom of the distribution cabinet.
- [] 12. Remove, insulate, and tie-back the fuse alarm jumper harness BLACK (BK) wire from the IB2-1 controller interface board terminal J4-6 (DI6+).
- [] 13. Remove, insulate, and tie-back the fuse alarm jumper harness RED (R) wire from the IB2-1 controller interface board terminal J4-5 (DI6-).
- [] 14. Remove and insulate the connector plugged in J4 of the system interface board.
- [] 15. Separate and insulate the connector on the fuse alarm jumper harness from the system wire harness. Connect the system wire harness connector to J4 on the system interface board.
- [] 16. Remove, insulate, and tie-back the fuse alarm jumper harness from the quick connect terminal installed on the bottom distribution panel return busbar.
- [] 17. Re-install the shield to the control shelf located at the bottom of the distribution cabinet.
- [] 18. Close the distribution cabinet front door.
- [] 19. Install converter modules 1C48241500 in the far-right converter module mounting positions, as required.
- [] 20. Enable the external alarms or notify appropriate personnel that this procedure is finished.
- [] 21. Ensure that there are no local or remote alarms active on the system.

1.6 Backing Up the NCU Configuration

1.6.1 NCU Version 1.1.80, or Later

General

To back up the NCU configuration, simply save the file named "SettingParam.tar".

Saving the "SettingParam.tar" File

Local Menu Navigation:

None.

Web Menu Navigation:

Advance Settings Menu / SW Maintenance Tab.

Procedure

1. Click on the "Retrieve File" button to save the file named "SettingParam.tar" to your computer. Select where you want the file to be copied to on your computer.

To aid in file management, you may change the name of the "SettingParam.tar" file to differentiate it from other "SettingParam.tar" files saved. The new name can use alpha and numeric characters preceding the original "SettingParam.tar" name (the end of the new file name **must** always be "SettingParam.tar"; for example, an acceptable filename would be "seville4SettingParam.tar").

Figure 1.20 Retrieve "SettingParam.tar" File

	Ethernet Users SNMP Language SW Maintenance Alarms DI Alarms DO(relays) Shunts	s Fuses Alarm Rep	port Power Split Monitor	Protocol Clear Data
Home	# Auto Config			System Status
	This function will automatically configure SM units and modbus devices that have been connected to RS485 bus.		Auto Config	System Voltage 53.9V
\$	Restore Factory Defaults			System Current 0.0A
Settings	Restore default configuration? The system will reboot.	Restore Defaults	Reboot controller	System Specifications
<i>C</i> -	Retrieve SettingParam.tar			System Name NCU
History Log	Retrieve the current settinos of the controller's adjustable parameters		Detrieve File	Rectifiers 4
matory Log	II. Datriaus Diagnactica Dakage		Reineve File	Controller Specifications
न्त्रि	•• Relieve Diagnosucs Package			Product Model M830D
System	Retrieve a diagnostics package to help troubleshoot controller issues		Retrieve File	Serial Number 03190307690
Inventory	L Upload/Download			Hardware Version A16
≓	Upload/Download needs to stop the Controller. Do you want to stop the Controller?		Stop Controller	Config Version CEN Default
Advanced				Coning version GEN_Delault
Jettings				Site Information
				Site Name NCU
				Site Location Veruv
01/04 Do y	you want to open or save SettingParam.tar (46.0 KB) from 10.201.229.44?		Open	Save Cancel × /ed.

1.6.2 NCU Version 1.1.70, or Earlier

General

There are two steps in backing up the system's NCU configuration:

- Save the NCU configuration package. This package includes the base configuration and any changes made to alarm severity levels, relay assignments, signal names and site information.
- Save a file named "SettingParam.run". This file contains changes made to alarm setpoints and other settings such as float/ equalize voltage, etc. A file named "SettingParam.run" is automatically created/appended by the controller whenever a User (or the factory at the time of shipment) makes changes to parameter settings via the local display or Web Interface. This file can be saved to your computer so you can restore any custom settings you may have made.

Saving the Configuration Package

Local Menu Navigation:

None.

Web Menu Navigation:

Advance Settings Menu / SW Maintenance Tab.

Procedure

You can upload (from the controller to your computer) a configuration package.

1. To upload a file, you need to shut down the controller first. When you select the SW Maintenance Tab, click on the "Stop Controller" button.

Figure 1.21 Upload - Stop Controller

pload/Download	
	Upload/Download needs to stop the Controller. Do you want to stop the Controller?
	Stop Controller

2. The following window opens.

Figure 1.22 Upload - Controller Stopped

	1 5 1								
Upload/Download	1 File								
Caution: Only the	file SettingPar	am run or file	s with extension tar	or tar oz c	an he downlo	aded. If the c	opeolawo	d filo is N	IOT
correct, the Control	oller will run ab	onormally. Yo	u must hit the STAR	T CONTRO	OLLER button	before leavin	g this scre	en.	101
Select File	Contro	oller was stor	oped successfully. Y	ou can uplo	ad/download	the file	OK		
Select File	Contro	oller was stop	oped successfully. Y	ou can uplo	oad/download	the file.	DK		
Select File File in controller	Configuratio	oller was stop on Package	oped successfully. Y	ou can uplo computer	ad/download	the file.	DK		
Select File File in controller	Configuratio	oller was stop on Package	oped successfully. Y	ou can upic computer	oad/download	the file.	DK		

- 3. Click "OK".
- 4. The following window opens.

Figure 1.23 Upload File

Ethernet Users SNMP Language SW Maintenance Alarms DI Alarms DO(relay) Shunts Fuse Fuse III Upload/Download File IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Advance > Advance	ed Settings	> SW Maint	enance				🚨 We	lcome:	admin Lo <u>c</u>	gout
Image: Upload/Download File Caution: Only the file SettingParam.run or files with extension.tar or .tar.gz can be downloaded. If the downloaded file is NOT correct, the Controller will run abnormally. You must hit the START CONTROLLER button before leaving this screen. Select File Browse Download to Controller File in controller Configuration Package Upload to Computer	Ethernet Users	SNMP	Language	SW Maintenance	Alarms	DI Alarms	DO(relay)	Shunts	Fuse		>>
Caution: Only the file SettingParam.run or files with extension .tar or .tar.gz can be downloaded. If the downloaded file is NOT correct, the Controller will run abnormally. You must hit the START CONTROLLER button before leaving this screen. Select File Browse Download to Controller File in controller Configuration Package V Upload to Computer	II Upload/Download	l File									1
File in controller Configuration Package V Upload to Computer	Caution: Only the f	ile SettingP Iler will run :	aram.run or file abnormally. Yo	es with extension .tar ou must hit the STAR	or .tar.gz (T CONTR(can be downlo OLLER button	baded. If the c	lownloade ng this scre	d file is N en.	IOT	
	File in controller	Configura	tion Package	Upload to C	computer		Controller	J			
				Start	Controller						

ALERT! Never navigate from this Web page without first clicking on "Start Controller". If you do, you will not have Web access. A manual system reset is required to restore Web access.

5. To **upload** a file to your computer, select "Configuration Package" from the "File in Controller" drop-down list box, and click on the "Upload to Computer" button to save the file to your computer. Select where you want the file to be copied to on your computer. Click "Start Controller" to restart the Controller.

Saving the SettingParam.Run File

Local Menu Navigation:

None.

Web Menu Navigation:

Advance Settings Menu / SW Maintenance Tab.

Procedure

1. Click on the "Retrieve File" button to save the file named "SettingParam.run" to your computer. Select where you want the file to be copied to on your computer.

To aid in file management, you may change the name of the "SettingParam.run" file to differentiate it from other "SettingParam.run" files saved. The new name can use alpha and numeric characters preceding the original "SettingParam.run" name (the end of the new file name **must** always be "SettingParam.run"; for example, an acceptable filename would be "seville4SettingParam.run").

Figure 1.24 Retrieve SettingParam.run

Retrieve the current settings of the controller's adjustable parameters.

1.7 Reloading a Backed-Up NCU Configuration

1.7.1 NCU Version 1.1.80, or Later

General

To reload the NCU configuration, simply download a saved "SettingParam.tar" file into the NCU.

Reloading the "SettingParam.tar" File

Local Menu Navigation:

None.

Web Menu Navigation:

Advance Settings Menu / SW Maintenance Tab.

Procedure

1. To download a file, you need to shut down the controller first. When you select the SW Maintenance Tab, click on the "Stop Controller" button.

Figure 1.25 Download - Stop Controller

Ethernet Users SNMP Language SW Maintenance Alarms DI Alarms DO(relays) Shunts Fuses Alarm Report Power Split # Auto Config This function will automatically configure SM units and modbus devices that have been connected to RS485 bus. Restore Factory Defaults Restore Configuration? The system will reboot. Retrieve SettingParam.tar Retrieve Diagnostics Package Retrieve a diagnostics package to help troubleshoot controller issues	
# Auto Config This function will automatically configure SM units and modbus devices that have been connected to RS485 bus. Auto Co # Restore Factory Defaults Restore default configuration? The system will reboot. Restore default configuration? The system will reboot. Retrieve SettingParam.tar Retrieve the current settings of the controller's adjustable parameters. Retrieve Diagnostics Package Retrieve a diagnostics package to help troubleshoot controller issues	ance Alarms DI Alarms DO(relays) Shunts Fuses Alarm Report Power Split Monito
This function will automatically configure SM units and modbus devices that have been connected to RS485 bus. Auto Co # Restore Factory Defaults Restore Defaults Restore default configuration? The system will reboot. Restore Defaults Reboot control # Retrieve SettingParam.tar Retrieve Retrieve Retrieve # Retrieve Diagnostics Package Retrieve Retrieve Retrieve a diagnostics package to help troubleshoot controller issues Retrieve Retrieve	
Image: Restore Factory Defaults Restore Factory Defaults Restore Defaults Reboot control Restore default configuration? The system will reboot. Restore Defaults Reboot control Image: Retrieve SettingParam.tar Retrieve the current settings of the controller's adjustable parameters. Retrieve Image: Retrieve Diagnostics Package Retrieve Current settings package to help troubleshoot controller issues Retrieve	us devices that have been connected to RS485 bus. Auto Config
Restore default configuration? The system will reboot. Restore Defaults Reboot control If Retrieve SettingParam.tar Retrieve Retrieve Retrieve the current settings of the controller's adjustable parameters. Retrieve Retrieve If Retrieve Diagnostics Package Retrieve Retrieve Retrieve a diagnostics package to help troubleshoot controller issues Retrieve Retrieve	
Retrieve SettingParam.tar Retrieve the current settings of the controller's adjustable parameters. Retrieve Diagnostics Package Retrieve a diagnostics package to help troubleshoot controller issues Retrieve adjustable parameters	Restore Defaults Reboot controller
Retrieve the current settings of the controller's adjustable parameters. Retrieve II Retrieve Diagnostics Package Retrieve Retrieve a diagnostics package to help troubleshoot controller issues Retrieve	
Retrieve Diagnostics Package Retrieve a diagnostics package to help troubleshoot controller issues Retrieve	rameters. Retrieve File
Retrieve a diagnostics package to help troubleshoot controller issues Retrieve	
	er issues Retrieve File
# Upload/Download	
Upload/Download needs to stop the Controller. Do you want to stop the Controller? Stop Contro	to stop the Controller? Stop Controller

2. The following window opens.

Figure 1.26 Download - Controller Stopped

<	Ether	net	Users	SNMP	Language	SW Maintenance	Alarms	DI Alarms	DO(relay)	Shunts	Fuse	Alarm Report	Power Split	Monitor Prote
	II Uplo	ad/D	ownload	d File										
	Caution abnorm	: Only ally, N	/ the file /ou mus	SettingPa t hit the ST	ram.run or file ART CONTR	s with extension .tar o OLLER button before	or .tar.gz ca leaving thi	in be downloa s screen.	ded. If the do	wnloaded	ile is NO	T correct, the Co	ntroller will run	
\$	elect Fil				_	Bro	owse	Download	o Controller					
F	ile in co	ntrol	ler	Configu	ration Pa Cor	ntroller was stopped s	uccessfully	. You can upl	oad/download	the file.	OK			
_	II Start	t Con	troller											
							St	art Controller						
														Þ

- 3. Click "OK".
- 4. The following window opens.

Figure 1.27 Download File

<	Ethernet	Users	SNMP	Language	SW Maintenance	Alarms	DI Alarms	DO(relay)	Shunts	Fuse	Alarm Report	Power Split	Monitor Prot
	Upload/[Download	l File										
L	Caution: On abnormally.	ly the file You must	SettingPar t hit the ST	am.run or files ART CONTRO	s with extension .tar o DLLER button before	r .tar.gz ca leaving thi	n be downloa s screen.	ded. If the do	wnloaded t	ile is NO	T correct, the Co	ntroller will run	
\$ 	elect File				Bro	wse	Download t	o Controller					
F	ile in contro	ller	Configur	ation Package	e 🔻 Uplo	ad to Com	puter						
	Start Co	ntroller											
						St	art Controller						

ALERT! Never navigate from this Web page without first clicking on "Start Controller". If you do, you will not have Web access. A manual system reset is required to restore Web access.

5. To download (from your computer into the controller) a "SettingParam.tar" file; click the "Browse..." button and navigate to the folder where the file to download is located. Select the file to be downloaded and then click the "Download to Controller" button. Click "Start Controller" to restart the controller with the downloaded file installed.

1.7.2 NCU Version 1.1.70, or Earlier

General

There are two steps in reloading a backed-up NCU configuration:

- One step to reload the saved NCU configuration package.
- One step to reload the saved "SettingParam.run" file.

Reloading the Configuration Package

Local Menu Navigation:

None.

Web Menu Navigation:

Advance Settings Menu / SW Maintenance Tab.

Procedure

You can download (from your computer into the controller) a configuration package (filename has a tar or tar.gz extension).

1. To download a file, you need to shut down the controller first. When you select the SW Maintenance Tab, click on the "Stop Controller" button.

Figure 1.28 Download - Stop Controller

II Upload/Downlo	ad	
	Upload/Download needs to stop the Controller. Do you want to stop the Controller?	
	Stop Controller	

2. The following window opens.

Figure 1.29 Download - Controller Stopped

Upload/Download File	NMP Language	SW Maintenance	Alarms	DI Alarms	DO(relay)	Shunts	Fuse	
Upload/Download File								
Caution: Only the file Se								
	ettingParam.run or file	s with extension .tar	or .tar.oz (an be downlo	aded. If the d	lownloaded	t file is N	TOT
correct, the Controller w	ill run abnormally. Yo	u must hit the STAR		OLLER button	before leavin	ig this scre	en.	
Select File								
	Controller was stop	oped successfully. Ye	ou can uplo	oad/download	the file.	OK		
File in controller Co	figuration Package	Upload to C	computer	l				
Start Controller								
		Start	Controller					

- 3. Click "OK".
- 4. The following window opens.

Figure 1.30 Download File

Advanc	ed Settings	> SW Maint	enance				& We	elcome:	admin	Logout
Ethernet User	s SNMP	Language	SW Maintenance	Alarms	DI Alarms	DO(relay)	Shunts	Fuse		>>
III Upload/Downloa	d File									
Caution: Only the	file SettingPa	aram.run or file	es with extension .tar	or .tar.gz (an be downlo	baded. If the o	downloade	d file is l	TON	
correct, the Contro	oller will run a	abnormally. Yo	ou must hit the STAR	T CONTRO	OLLER buttor	before leavir	ng this scre	en.		
Select File			Brow	/se	Download to	o Controller				
File in controller	Configurat	ion Package	Vpload to C	computer	1					
Start Controller										
			Start	Controller						
					_					

ALERT! Never navigate from this Web page without first clicking on "Start Controller". If you do, you will not have Web access. A manual system reset is required to restore Web access.

5. To download (from your computer into the controller) a configuration package; click the "Browse..." button and navigate to the folder where the file to download is located. Select the file to be downloaded and then click the "Download to Controller" button. Click "Start Controller" to restart the controller with the downloaded file installed.

Reloading the SettingParam.Run File

Local Menu Navigation:

None.

Web Menu Navigation:

Advance Settings Menu / SW Maintenance Tab.

Procedure

You can download (from your computer into the controller) a "SettingParam.run file".

1. To download a file, you need to shut down the controller first. When you select the SW Maintenance Tab, click on the "Stop Controller" button.

Figure 1.31 Download - Stop Controller



2. The following window opens.

Figure 1.32 Download - Controller Stopped

Ethemet Osers	SINIMP	Language	Sw Maintenance	AldIIIIS	DI Alamis	DO(relay)	Shunis	ruse	
Upload/Download	l File								
Caution: Only the f correct, the Contro	ile SettingPa ller will run a	iram.run or fil bnormally. Yo	es with extension .tar ou must hit the STAR	or .tar.gz (can be downlo	baded. If the d before leavin	lownloaded	d file is N en.	NOT
	-						-		
Select File	Cont	roller was sto	pped successfully. Y	ou can uple	oad/download	the file.	DK		
Select File	Cont	roller was sto	pped successfully. Y	ou can uple	oad/download	the file.	DK		
Select File File in controller	Configurati	roller was sto	pped successfully. Y	ou can uple omputer	oad/download	the file.	ок		
Select File File in controller	Configurati	roller was sto	pped successfully. Y	ou can uple omputer	oad/download	the file.	DK		

- 3. Click "OK".
- 4. The following window opens.

Figure 1.33 Download File

Upload/Downloa	d File									
Caution: Only the	file SettingPa	ram.run or files	with extension .tar	or .tar.gz o	an be downlo	aded. If the d	lownloade	d file is N	ют	
correct, the Contro	oller will run al	onormally. You	must hit the STAR	T CONTRO	OLLER button	before leavin	ig this scre	en.		
correct, the Contro Select File	oller will run al	onormally. You i	must hit the STAR	T CONTRO	DLLER button	before leavin	ng this scre	en.		
correct, the Contro Select File File in controller	Configuratio	onormally. You n	must hit the STAR Brow	T CONTRO	Download to	before leavin	ng this scre	een.		
correct, the Contro Select File File in controller	Configuration	onormally. You n	must hit the STAR Brow Upload to C	T CONTRO	DLLER button	o Controller	ng this scre	een.		

ALERT! Never navigate from this Web page without first clicking on "Start Controller". If you do, you will not have Web access. A manual system reset is required to restore Web access.

5. To **download** (from your computer into the controller) a "SettingParam.run" file; click the "Browse..." button and navigate to the folder where the file to download is located. Select the file to be downloaded and then click the "Download to Controller" button. Click "Start Controller" to restart the controller with the downloaded file installed.

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