Conext Three Phase Inverters

How to upgrade the Comm and DSP firmware 2014-06-22



How to upgrade firmware

- > Overview
- Provide power to inverter Either DC or AC
- > Upgrade by PC or Notebook

Overview

Note:

- There are 3 CPUs inside the inverter
- Upgrade DSP or Red., the data must go through the COMM CPU
- Upgrade B/R is fixed at 9600



Inverter

Steps to Upgrade:

Step 1 - Provide power to inverter Either DC or AC. Only one is required

DC Input voltage should be > 200 Vdc AC voltage should be 230 Vac



- 1. Keep switch off before connect to inverter
- 2. Beware of the connection that L1 to pin1, L2 to pin2, L3 to pin3, and PE to Ground.
- 3. Incorrect wiring of PE (ex. PE and L1 were reversed) will cause electric shock or damage computer and/or inverter
- 4. Don't connect both DC and AC power, or inverter will start to operate

Upgrade by PC or Notebook

Step 2: Communication connection – RS485

•Loosen 2 screws and remove cover plate to access comm. card. (location shown below) •Connect computer to RS485/USB or RS485/RS232 cable

•Connect RS485 port from cable to communications card RS485 port (location shown bele



Step 3: Power on – switch on Power source

Step 4: Turn the main disconnect switch to ON position

Step 5: Start upgrade procedure

- I. Download the firmware files from SolarExchange (Services/Conext TL/Firmware)
- II. Execute the program "Upgrade V5.3.exe"
- III. Click Load File and select the correct firmware file. It is suggested to start with COMM firmware first.



IV. Select the correct COM port and press the Arrow button.



V. Check the current firmware version before uploading.



VI. Click Upgrade button to start upgrading.

Upg	rade Tool N	/5.3															_ 🗆 🗙
Load	File																
5	C:\Users	bavi	er.so	na\E	Deskt	op\F	older	rs\FV	V\RP	DOOR	P R	ED V	/0150)(DAT	E1	Product ID:	52303200
			-	-		-		-	-	-						Processor:	2
	Address	1	2	3	4	5	6	7	8	9	10	11	12	13	-	MetaBlock Version:	0.00
1	08002000	00	09	00	20	ED	7E	00	80	8D	5C	00	08	A3		Hardware Version:	1.00
2	08002020	00	00	00	00	00	00	00	00	00	00	00	00	AD		Software Version:	1.50
3	08002040	B5	5C	00	08	B7	5C	00	08	89	5C	00	03	BB		Start Address:	0x08002000
4	08002060	FF	5C	00	80	01	5D	00	68	03	5D	00	08	05		Stop Address:	0x08008000
5	08002080	Δ7	SD	00	08	A 9	5D	00	08	AB	5D	00	08	AD		Erase Size:	0
5	080020A0	B7	5D	00	08	B9	5D	00	08	BB	5D	00	08	BD		Fill Value:	0xFF
	080020C0	BB	5F	00	80	BD	5F	00	80	BF	5F	00	08	C1		Raud Date:	0400
3	080020E0	CB	SF	00	08	CD	5F	00	08	CF	5F	00	08	AA		Program Size:	9600
	08002100	03	02	00	01	32	01	80	25	00	20	00	08	00	Ŧ	Program Size.	°
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1	V ID MC	IJ# Ne	Mode ormal		Mod PVSN	e I VCLU	Cli	ck	U	pg	ra	de	b	utte	or	ı to start u	pgrade.
•																	4
Fo In Rx Fo ID1:	und 1 pcs vestigate: :: und 0 pcs Getting In	forn	natio	on(19	9200))											• III •
			BR:1	9200	CON	v1 is C)pen										

VII. When upgrade done appears, the upgrade for this processor is finished.



- VIII. Please repeat steps III to VII for the DSP.
- IX. Please repeat steps III to VII for the RED processor.

,	Verify the following		d Tile	/5.3															
	version numbers		C:\Users\xavier.song\Desktop\Folders\FW\RPDXXRP_RED_V0150(DATE1													re1	Product ID: Processor:	52303200 2	
	 Processor0 (Comm) - 		Address	1	2	3	4	5	6	7	8	9	10	11	12	13	*	MetaBlock Version:	0.00
	SW should be 1.96	1	08002000	00	09	00	20	ED	7 E	00	08	8D	5C	00	08	A3		Hardware Version:	1.00
		2	08002020	00	00	00	00	00	00	00	00	00	00	00	00	AD		Software Version:	1.50
		3	08002040	B5	5C	00	08	B7	5C	00	08	B9	5C	00	08	BB		Start Address:	0x08002000
	 Processor1 (DSP) – 	4	08002060	FF	5C	00	08	01	5D	00	08	03	5D	00	08	05		Stop Address:	0x08008000
	SW should be 2.10	5	08002080	A7	5D	00	08	A9	5D	00	08	AB	5D	00	08	AD		Erase Size:	8
	5 vv 5110ulu be 2.10	6	080020A0	B7	5D	00	08	B9	5D	00	08	BB	5D	00	08	BD		Fill Value:	0xFF
		7	080020C0	BB	5F	00	08	BD	5F	00	08	BF	5F	00	08	C1		Checksum:	0x0342
	 Processor2 (RED) – 	8	080020E0	CB	5F	00	08	CD	5F	00	08	CF	5F	00	08	AA		Baud Rate:	9600
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Step 6: Turn the main disconnect to "OFF" and remove the power source. Step 7: Upgrade completed.

If your upgrade fails, you will see a green and red LED on the LCM flashing alternatively. It means the inverter is in Boot loader mode. Please adjust delay value to 50 and then upgrade and try again.

Upg	rade Tool V	5.3																		x
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2	08002020	00	00	00	00	00	00	00	00	00	00	00	00	AD		Softwar	e Version	s 1.5	0	
3	08002040	85	50	00	08	57	50	00	08	89	50	00	08	00		Star	Address	e 0x0	800200	0
4	08002060	FF	50	00	08	01	50	00	08	03	50	00	08	05		Stop	Address	s: 0x0	600600	0
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8	080020E0	03	5F	00	08	CD	55	00	08	CF	SF.	00	08	AA		8	aud Rate	s 960	0	
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