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SNTL300P-PCSUITE interface suite

Configuration and Monitoring software for Sentinel 300P automatic switch mode battery chargers

Installation and Operation Manual



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System requirements

The SNTL300P-PCSUITE is a PC-based software program for configuring and monitoring Sentinel 300P series battery chargers. Communication between the PC and Sentinel 300P is via a USB and RS485 network.

Minimum system requirements:

- 1. Sentinel 300P series battery charger
- 2. Personal Computer (PC):
 - Processor: x86 (32 bit), 1GHz
 - RAM: 1Gb
 - USB port
 - Display: minimum resolution 1024 x 768
 - Operating System: Windows 7, Windows Vista, Windows XP Professional or Windows XP Home with .NET framework 3.5 or higher
- 3. SNTL300P-PCSUITE software
- 4. USB / RS485 converter recognised as COM port on Windows OS
- 5. RS485 lead (connecting Sentinel to USB/RS485 converter)
- 6. USB lead (connecting PC to USB/RS485 converter)

Item 3 above (SNTL300P-PCSUITE software) is available on request, part number 42.70.3898: the software is supplied by email attachment.

Item 3 is also available on CD-ROM, along with items 4 – 6, as a complete connection suite, model SNTL300P-PCCONN, part number 42.70.3899.

Installation Guide

1, Run the Sentinel 300-P Interface Suite.exe file to install software to PC



Sentinel 300-P Interface Suite.exe



2, Select Next to continue through installation process.



4, Select installation folder

InstallShield Wizard
Start Copying Files Review settings before copying files.
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
×
v V
InstallShield
< <u>B</u> ack <u>Next></u> Cancel

6, Confirm installation by selecting Next



3, After viewing license agreement, select YES to proceed

InstallShield Wizard	×
Select Program Folder Please select a program folder.	
Setup will add program icons to the Program F name, or select one from the existing folders lis	older listed below. You may type a new folder t. Click Next to continue.
Program Folders:	
SNTL 300-P Interface Suite	
Existing Folders:	
Accessories Administrative Tools A-PDF Number Applications Microsoft Office Startup Windows Live	
InstallShield —	< Back Next > Cancel

5, Select program folder

InstallShield Wizard	
	InstallShield Wizard Complete Setup has finished installing SNTL 300-P Interface Suite on your computer.
	Kack Finish Cancel

7, Installation is complete, select Finish

After installing SNTL300P interface suite on your PC, a desk top icon as shown below will be added. Select this to launch the SNTL300P interface suite



Environment settings

From home screen, select *settings* from Menu Bar and then *environment*

File Settings Update Charger Firmware Help		
Communication Status		
Scan Network Disconnect From Network	Select Charger From List:	
Charger Status	Charger Active Display	Charging Hours
Charger Volage 5 10 15 20 25 0 10 10 10 10 10 10 10 10 10 10 10 10 10	Battery C Battery Charger State 80 Battery Charger State 60 Charging Faults 20 0	0 0 0 0 0 AC On Hours 0 0 0 0 0
Charges Settings Charges Data	Relay Status Low Alarm High Alarm Charge	Fail 📕 Mains Fail 📕
Active Charger Settings	Charger Hardware	
Profile Control:	Charger Firmware:	
Profile Name:		
Float Valtage Vdc	CDMs Board Firmware:	
Boost Voltage: Vdc		
Boost Initiate: Vdc	Charger DIP Switch Setting	
Root Time: Minutes		
Low Alem Voltage		
High Alarm Voltage: Vdc		
Number Of Cels:		
Remote Stored Profile	Global Charger Settings	
Profile Name:	Battery-Check Interval: Minutes	
Float Voltage: Vdc		
Boost Voltage: Vdc		
Boost Initiate: Vdc		
Boost Time: Minutes		
Low Alarm Voltage: Vdc		
High Alarm Voltage: Vdc		
Number Of Cells:		

When asked for *password*, enter the supplied password to access the appropriate level.

CCL Sentinel 300-P Interface Suite	
File Settings Update Charger Firmware Help	
Communication Status	Select Charger From List:
Scan Network	
Disconnect From Network	v
Charger Status	
Charger Mollage	Battery 10
10 15 20 or 4 6 8 100	100 Battery Charger State
$5_{1}^{-5} \sqrt{(1 + 1)^2 h_0 d_{10}} d_{10}^{-2} = 0$	AC On Hours
	40 Charging Faults 0.0.0.0.0
SNTL300P Interface Suite	
Enter Password to change access level	or us
	High Alarm Charge Fail Mains Fail
	Cancel
Charger Settings Charger	
Active Charger Settings	
Profile Control:	Charger Timmare.
Profile Name:	CDM, David Einenen
Float Voltage: Vdc	COMS board nimwate:
Boost Voltage: Vdc	
Boost Initiate Vide	Charger DIP Switch Setting
Deart Time Minutes	
Duos Tille. Minutes	
Low Alarm Voltage: Vdc	
High Alarm Voltage:	1 2 3 4 5 6
Number Of Cells:	
Remote Stored Prohle	Global Charger Settings
	Battery-Check Interval: Minutes
Float voitage: Vdc	
Boost Voltage: Vdc	
Boost Initiate: Vdc	
Boost Time: Minutes	
Low Alarm Voltage: Vdc	
High Alarm Voltage: Vdc	
Number Of Cells:	

Connecting To Charger

Once connected to charger and SNTL300P has either DC or AC power, select **Scan Network** to initiate scan

See *resolving communication errors* section of this document should you have problems connecting to the SNTL300P

Upon connection to the SNTL300P the **Select Charger From List** section shown below will list all SNTL300P units that are active on the connected RS485 MODBUS. Select the appropriate charger to connect to.

 File
 Settings
 Update Charger Firmware
 Help

 Communication Status
 COM port failed to open
 Image: Communication Status

 Disconnect From Network
 Image: Communication Status
 Image: Communication Status



Once communication is established with that unit, the Voltmeter, Ammeter and Charger Status windows and indications will become active and reflect the SNTL300P's current condition

The two thermometers will indicate SNTL300P local temperature as well detected battery temperature should a remote temperature compensation lead be connected.

Temperature is shown in °C

Note: Local Charger temperature is for information purposes only.





Using the Interface Suite

There are 3 modes of operation for the SNTL300P Interface Suite

- Basic View Level
- Engineer Level
- Manager Level
- CCL/Admin Level (Reserved)

Under *settings/environment* enter password to access either: Operator, Engineer or Admin level (see *SNTL300P Interface Suite Environment* settings section of this document)

Should an incorrect password be entered then the system will state the following:

Sentinel 300-P Interface Suite				
8	Incorrect Password			
	OK			

And limit access to View Level only

View Level Overview

If no password is entered when requested or environment level not changed then the Interface Suite works in *view mode* only. From this setting the following two screens are available:

Charger settings screen

This provides information of the set conditions of the SNTL300P.

Active Charger Settings

This provides information on what the SNTL300P charger is currently configured to.

Remote Stored Profile

This provides information on what the SNTL300P charger has stored when configured to Remote Profile

Charger Hardware

The SNTL300P provides information on what revision firmware it contains along with COMs board firmware if attached.

Charger DIP switch settings The current configuration of the DIP switches located on the rear of the SNTL300P is shown.

Global Charger Settings Battery Check Period and Charger Current Limit are shown

Charger data screen

This provides a scrolling display of the chargers output voltage and current.

Battery Voltage Graph This displays a record of the chargers output voltage (VDC)

Charger Current Graph

This displays a record of the chargers output current (ADC)





Engineer View Overview

As well as the basic view screen, an additional tab of Charger Configuration is now available



Within the *charger configuration* tab the following additional settings are available:

Settings of Real Time Clock

(COMs Option only) The SNTL300P can be synced to PC clock American or European Date Layout can be selected Select from a pre-defined list of Battery Profiles

Operator password

The engineer password can be changed or viewed

Remote Profile Settings

From the predefined list of battery profiles a new charger profile can be selected and downloaded to charger

Global Charger Settings

Amend Battery Check Interval – see SNTL300P configurable settings for details Clear 24V Auto-Detect Lock in– see SNTL300P configurable settings for details Amend Charger Node Address– see SNTL300P configurable settings for details Boost Drop Out Current - see SNTL300P configurable settings for details Factory Profile Boost Time - see SNTL300P configurable settings for details



Download Profile To Charger is only enabled if charger DIP switch is in remote setting

Manger View Overview

As well as the basic view screen, an additional tab of Charger Configuration is now available





Within the *charger configuration* tab both the *operator configuration levels* are available plus the following additional settings are now available:

Manager password

The manager password can be changed or viewed

Remote Profile Settings

From the predefined list of battery profiles a new charger profile can be selected and downloaded to charger. New charger profiles can also be both created and deleted – see SNTL300P configurable settings for details

CAN Output

The SNTL300P can now be configured to deliver a J1939 CANBUS compliant output from terminals 12 and 13 from CN2 (IO Array).

Note: Firmware Revision v003 or above is required

To configure your hardware for CAN, set Jumpers J5a and J5b, located just above LED's, from position 2-3 as shown to positions 1-2. CAN output is now from 12 & 13 of the IO array.

L Sentinel 300-P Interface Suite			
Settings Update Charger Firmware Help			
ommunication Status		Select Charger From L	ist:
Scan Network			
Disconnect From Network			
		_	
harger Status		-	
Charger Voltage Charge	Current Charger *C Batter	Charger Active Display	Charging Hours
10 15 20 em 4	6 g 100 100	Rattory Charger State	000000
5 Automotion La 20 30 2 V	1 / j 10 80 - 80 -	battely charger state	AC On Hours
a fine a start a		Charging Faults	
	20		
	0+ 0+	· · · · · · · · · · · ·	
	-20 -20	Low Alarm High Alarm Charge	al Mansfal
	NZA NZA		Input # 2
Charger Settings	Charge Data Auto detect or	nnia	
Real Time Clock		cl	Global Charger Settings
Date format: dd/mm/uu	New ENGINEED Deserves	View Password	Battery Check Interval Mins
C Date format: mm/dd/uu	New ENGINEER Password.	Store Password	Clear 24V Auto-detect Lock-in
			Tharger Slave Address: 100
15 10 14 15 59 18	New MANAGED Deserved	View Password	Parat Data and Contract
Sync To PC Clock	New MANAGEN Password.	Store Password	Boost Dioprodi Colleni.
Update Clock			Auto-boost period: Days
		F	actory-profile Boost Time: 0 Mins
		1	Sattery check mode:
Remote Profile Settings			Select
Select Profile: Select Profile		New Custom Profile	Input #1 runction:
Profile Name:		Rore Dustom Profile	
Float Voltage: Vdc			Battery-missing action:
Boost Voltage: Vdc		erete Lustom Profile	Seiect
Boost Initiate Voltage: Vdc		lear Charger Profile	Download Global Settings
Law Alam Vehana Vide		and charger route	CAN Output
High Alarm Voltage: VGC		vioad Profile To Charger	C Enabled
Thermonia workdes. Yes			11 1 . 01

SNTL300P Configurable Settings

Charger Profiles

Depending upon access password entered, the selection or creation of new charger profiles is available. The configurable fields are as follows:

PROFILE NAME FLOAT VOLTAGE	Name of profile This should be according to manufacturer recommendations for battery type, i.e. Wet Lead Acid = 2.25V/p/c = 12V Settings = 13.5V/dc
BOOST VOLTAGE	This should be according to manufacturer recommendations for battery type, i.e. Wet Lead Acid =
	2.23V/p/c = 12V Settings = 14.1dc
BOOST INITIATE VOLTAGE	The voltage at which the SNTL300P Initiates Boost
	Function. This should be a voltage lower than Float
	voltage, typically nominal (i.e. 12V or 24V)
BOOST PERIOD	Amount of Time for Charger to remain at Boost Voltage
	before returning to Float
LOW ALARM VOLTAGE	Low Alarm Voltage Setting
HIGH ALARM VOLTAGE	High Alarm Voltage Setting
NUMBER OF CELLS	Used for correct calibration of Temperature
	Compensation. If, such as in the case of Power Supply
	modes, no temperature compensation is required enter '0'

Preset Charger Profiles

The SNTL300P contains an inbuilt list of the most common type of batteries used, these can be selected from the drop down menu: 12V Wet Lead Acid 12V Wet Lead Acid for Fire Pump* 12V Calcium Calcium 12V Lead Acid Antinomy, Hybrid Sb-Ca (Antimony-Calcium) 12V VRLA – AGM 12V VRLA – Gel 10 Cell NiCd 12V Power Supply Mode 18 Cell NiCd 20 Cell NiCd 24V Wet Lead Acid 24V Wet Lead Acid for Fire Pump* 24V Calcium Calcium 24V Lead Acid Antinomy, Hybrid Sb-Ca (Antimony-Calcium) 24V VRLA – AGM 24V VRLA – Gel 24V Power Supply Mode

*Fire Pump Calibrations are only available on SNTL300P-FP Fire Pump Models

Creating Custom Profiles

Only available in Manager Mode

Remote Profile Settings Select New Custom Profile this will allow entry of Select Profile: Select Profile. • charger profile parameters as outlined above. Profile Name: New Custom Profile Float Voltage: Vdc Boost Voltage: Vdc Boost Initiate Voltage: Vdc Boost Period: Minutes Low Alarm Voltage: Vdc High Alarm Voltage: Vdc Number Of Cells: (0 = No Temperaturte Compensation) Remote Profile Settings Enter all parameters as required • Select Profile: Profile Name: Float Voltage: Vdc Boost Voltage: Vdc Store Custom Profile Boost Initiate Voltage: Vdc Delete Custom Profile Boost Period: Minutes Low Alarm Voltage: Vdc High Alarm Voltage: Vdc Number Of Cells: (0 = No Temperaturte Compensation) Remote Profile Settings Once complete, select Store Custom Profile Select Profile: • Profile Name: TEST PROFILE Float Voltage: 13.2 Vdc Boost Voltage: 14.5 Vdc Store Custom Profile Boost Initiate Voltage: 12.0 Vdc Delete Custom Profile Boost Period: 360 Minutes Low Alarm Voltage: 12.0 Vdc High Alarm Voltage: 15.0 Vdc Number Of Cells: 6 (0 = No Temperature Compensation) Remote Profile Settings The newly created custom profile will now appear Select Profile: in the drop down list of profiles Profile Name: CA CA 24V LA ANTIMONY 24V Float Voltage: VLRA AGM 24V VRLA GEL 24V Boost Voltage: Boost Initiate Voltage: Boost Period: Boost Period: CA CA 24V VLRA AGM 24V VLRA AGM 24V POWER SUPPLY 24V 12V FIRE PUMP TEST PROFILE Boost Period: SUPPLY 24V 12V FIRE PUMP TEST PROFILE . New Custom Profile

Low Alarm Voltage: 12.0 Vdc High Alarm Voltage: 15.0 Vdc

Number Of Cells: 6 (0 = No Temperaturte Compensation)

Store Custom Profile Delete Custom Profile

Deleting Custom Profiles

Select the custom profile from the drop down list of profiles

Once selected, as shown, select delete custom

Select Profile:	· · · · ·	
Profile Name:	CA CA 24V	
Float Voltage:	VLRA AGM 24V VBLA GEL 24V	New Custom Profile
Boost Voltage:	POWER SUPPLY 24V	Store Custom Profile
Boost Initiate Voltage:	24V FIRE PUMP	
Boost Period:	360 Minutes	Delete Custom Profile
Low Alarm Voltage:	12.0 Vdc	
High Alarm Voltage:	15.0 Vdc	Download Profile To Charger
Number Of Cells:	6 (0 = No Temperaturte Compensation)	
Remote Profile Setting	\$	
Remote Profile Setting	\$	
Remote Profile Setting Select Profile:	s TESTIPROFILE	
Remote Profile Setting Select Profile: Profile Name:	S	
Remote Profile Setting Select Profile: Profile Name: Float Voltage:	TEST PROFILE 13.2 Vdc	New Custom Profile
Remote Profile Setting Select Profile: Profile Name: Float Voltage: Boost Voltage:	TEST PROFILE	New Custom Profile
Remote Profile Setting Select Profile: Profile Name: Float Voltage: Boost Voltage: Boost Initiate Voltage:	IEST PROFILE TEST PROFILE 13.2 Vdc 14.5 Vdc 12.0 Vdc	New Custom Profile Store Custom Profile
Remote Profile Setting Select Profile: Profile Name: Float Voltage: Boost Voltage: Boost Initiate Voltage: Boost Period:	IEST PROFILE TEST PROFILE 13.2 Vdc 14.5 Vdc 12.0 Vdc 360 Minutes	New Custom Profile Store Custom Profile Delete Custom Profile
Remote Profile Setting Select Profile: Profile Name: Float Voltage: Boost Voltage: Boost Initiate Voltage: Boost Period: Low Alarm Voltage:	IEST PROFILE Image: Constraint of the second s	New Custom Profile Store Custom Profile Delete Custom Profile
Remote Profile Setting Select Profile: Profile Name: Float Voltage: Boost Voltage: Boost Initiate Voltage: Boost Period: Low Alarm Voltage: High Alarm Voltage:	IEST PROFILE Image: Constraint of the second s	New Custom Profile Store Custom Profile Delete Custom Profile Download Profile To Charger

Remote Profile Settings

Remote Profile Settings Select Profile:

All data will now show as blank

profile

Remote Profile Setting	\$	
Select Profile:		
Profile Name:		
Float Voltage:	Vdc	New Custom Profile
Boost Voltage:	Vdc	Store Custom Profile
Boost Initiate Voltage:	Vdc	J
Boost Period:	Minutes	Delete Custom Profile
Low Alarm Voltage:	Vdc	
High Alarm Voltage:	Vdc	Download Profile To Charger
Number Of Cells:	(0 = No Temperaturte Compensation)	

Applying Custom Profiles

Select the profile you wish to apply to the SNTL300P Charger from the drop down menu

obloct folio.		
Profile Name:	CA CA 24V LA ANTIMONY 24V	
Float Voltage:	VLRA AGM 24V VRLA GEL 24V	New Custom Profile
Boost Voltage:	POWER SUPPLY 24V 12V FIRE PUMP	Store Custom Profile
Boost Initiate Voltage:	24V FIRE PUMP	
Boost Period:	360 Minutes	Delete Custom Profile
Low Alarm Voltage:	12.0 Vdc	Dennels ad Draffle Ta Charace
High Alarm Voltage:	15.0 Vdc	Download Fronte To Charger
Number Of Cells:	6 (0 = No Temperaturte Compensation)	
Remote Profile Setting	5	
Select Profile:	TEST PROFILE	
Profile Name:	TEST PROFILE	
Float Voltage:	13.2 Vdc	New Custom Profile

Once profile is selected, select download profile to charger

Notes: The charger must be set to Remote Configuration settings via the DIP switches. Refer to **Operation & Installation Manual of SNTL30P** Charger



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24V Auto-Detect Lock in

If the SNTL300P Battery Charger has been configured to Auto-Detect and on power up has detected 24V Battery Settings in accordance with voltage configuration, after 24 hours of operation, it will automatically lock itself into 24V operation. Once locked in, in event of AC mains failure and system reset, it will always default to 24V mode. To clear this timer and re-instate Auto-Detect Mode, from *Global Charger Settings*, check the *Clear 24V Auto-detect Lock-In* and then select *Download Global Settings*

Battery Check Routine

The Battery check process reduces the output of charger to nominal voltage and validates terminal voltage.

During this battery check it will report *Battery Check* in the *Battery Charger State* window.

If no battery is detected, or battery voltage is <9VDC (12v) or <18VDC (24v) then it reports **Battery Missing** in the **Battery Charger State** window.

The SNTL300P Performs a battery at the following instances if set to any profile that is not a Power Supply Mode:

On AC Power Up, before entering boost mode of operation

Once charger is in Float mode, the charger performs a battery check in accordance with the **Battery Check Interval** setting as configured in **Global Charger Settings**

To change the interval time of the battery check routine, enter required time in minutes into **Battery Check Internal** and **Download Global Settings** to SNTL300P

Note: When download a new interval time, the changes will not take place until either:

- a) AC & DC power is cycled and SNTL300P has performed a system restart
- b) Until existing battery check period has elapsed

Should the SNTL300P report a battery check, it will continue checking every 1 minute for battery until fault has cleared. Once a battery is detected it will revert to **Battery Check Interval** time



Battery Charger State

Battery Check.....

Battery Charger State Battery Missing!

I	-Global Charger Settings						
	Battery Check Interval: Mins						
	Clear 24V Auto-detect Lock-in 🛛 🦳						
	Charger Slave Address: 100						
	Boost Drop-out Current: 0 A						
	Auto-boost period: 0 Days						
	Factory-profile Boost Time: 0 Mins						
	Download Global Settings						

Setting Charger Address

The SNTL300P Network address can be configured between 100 and 250, to change this enter new address in *Charger Slave Address* and then select *Download Global Settings*

Note: If multiple SNTL300P units are connected to the same RS485 network, ensure that they have unique addresses configured.

Boost Drop Out Current

The SNTL300P will terminate its Boost cycle if the output current has dropped below a preset level. This prevents needless battery gassing and temperature rise, once the battery is fully charged.

Configurable **Boost Drop-Out Current** between 0 (Disable) and 5amps to a 0.1A resolution, and then select **Download Global Settings**

Auto-Boost Period

The SNTL300 employs a configurable option to allow an auto-boost cycle to occur without the need to manually engage it. Should the charger not have recorded a boost cycle happening within a given period, it exercises the batteries, elevating their terminal voltage, recombining the partly separated water and strong sulphuric acid within the cells, preventing build up on the battery plates and maintaining battery life and performance

Enter required **Auto-Boost Period** in Days, 0 (Disable) -31, and then select **Download Global Settings**

Factory Profile Boost Time

The Standard Boost Extension Time of preset profiles can be configured via Global Charger Settings, Enter required **Factory Profile Boost Time** in Minutes and then select **Download Global Settings**

Maximum boost period

1440 (*default*) the charger will monitor time spent in ramp to boost mode, should the charger not reach the expected boost target voltage in a given time period, the unit will alarm and turn its output off for 4 hours before attempting again. This provides increased protection against batteries with shorted cell(s). Bit 10 in the alarm status register provides indication of this fault.

Global Charger Settings		
Battery Check Interval:		Mins
Clear 24V Auto-detect Lock	in 🔽	
Charger Slave Address:	100	
Boost Drop-out Current:	0	A
Auto-boost period:	0	Days
Factory-profile Boost Time:	0	Mins
Maximum boost period:	0	Mins
Battery check mode:		
Battery check mode:		ī
Battery check mode: Select Input #1 function:	2]
Battery check mode: Select Input #1 function: Select	2	- - -
Battery check mode: Select Input #1 function: Select Battery-missing action:	2	0
Battery check mode: Select Input #1 function: Select Battery-missing action: Select	2	- - - -
Battery check mode: Select Input #1 function: Select Battery-missing action: Select Baud Rate:	2	- - - -
Battery check mode: Select Input #1 function: Select Battery-missing action: Select Baud Rate: Select	2	
Battery check mode: Select Input #1 function: Select Battery-missing action: Select Baud Rate: Select Parallel charger operat	ion	- - - -

Configurable options from drop down Menus Battery check mode

10 second (default) whereby the charger ramps its output voltage down looking for a voltage of >nominal voltage of battery, this check is performed according to the Battery Check Interval set in the Global Charger Settings and as described in the Battery Check Routine section in this document.

Ultra Fast for an immediate detection of removal of battery when in float mode of operation. *Note: panel load must be resistive >50mA and have no active capacitance value.*

Input #1 function

The input can now be configured to either manually initiate a boost cycle *(default)* or completely disable all boost functions.

Battery-missing action

The charger can be configured for float voltage output under battery missing alarm **(default)** or to shut off its own DC output until battery detected *Note: Measured voltage must exceed nominal voltage* of battery for re-detection to occur.

Baud Rate

9600 (*default*) the RS485 baud rate can be configured from the additional drop down menu. This baud rate only applies when the SNTL300P is in remote configuration mode (DIP switch 5 ON).

The SNTL300P must be restarted for this change to take effect.

Parallel Operation

By enabling this option, the SNTL300P can now connected in parallel for an increased current output. This option disables all battery checking functions and therefore the battery missing check interval, battery check mode and battery missing action options. It also disables the Auto Detect DIP switch function. If this option is enabled and DIP switches 1-4 are set to off for Auto Detect, the SNTL300P will not turn its output on and will alarm.

Select desired configuration then **Download Global** Settings



Resolving Communication Errors

If the correct **COM** port settings have not been entered the following errors will occur

55	CCL Sentinel 300-P Interface Su	te
Fi	le Settings Update Charger Firmwa	re Help
	Communication Status Scan Network Disconnect From Network	COM port failed to open
		<u>×</u>



Under *settings* – *communication* settings set the following parameters.

RS485 Address (Minimum) 100 RS485 Address (Maximum) Up to 250

Note:

The Higher the number the longer it will take for the system to scan node addresses, if possible limit the Maximum address number to as low as possible.

Communication Settings	
RS485	
C RS232	Com Port: 11
Baud Rate	
9600	○ 57600
C 14400	C 115200
C 19200	C 128000
38400	
Network Search Limits	
RS485 Address (Minimum):	100 (100-250)
RS485 Address (Maximum):	105 (100-250)
Apply	Cancel

RS485 Com Port must match the device settings within the Windows OS they can be found under **Control Panel/System/Device Manager** and should be listed under **Ports (COM & LPT)**



In order for customers to transmit their own remote profiles to the SNTL300P, the following protocol must be used:

Packet must be sent in MODBUS RTU format.

Use the 'Set multiple holding registers' command (0x10)

Slave address must equal that of the charger. (Default of 100)

Register start address = 64

Number of points = 17

Register	SNTL300P Function	Scaling
40064	Float voltage	Voltage X 10
40065	Boost voltage	Voltage X 10
40066	Boost initiate voltage	Voltage X 10
40067	Boost period	Minutes
40068	Low alarm voltage	Voltage X 10
40069	High alarm voltage	Voltage X 10
40070	Number of cells	Cells X 1
40071-40080	Profile name	2 ASCII characters per register

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