Vissersdijk 4
4301 ND Zierikzee
The Netherlands

Tel. +31 111 413656
Fax. +31 111 416919
www.deltapowersupplies.com

**DELTA** ELEKTRONIKA B.V.

# SM3300 Firmware Revision History

*Legend:*

B = Bug fix
$ = valuable improvement
N = New feature
I = Info

## *Changes from P0160 to P0161*

*Feb 6th,2023*

B Int Mod Con:
Output status could not be linked to a contact of INT MOD CON. This release fixes that.

## *Changes from P0157 to P0160*

I Internal:
For uniformity reasons we made some adjustments in the naming of files and internal information.
No effect on the firmware itself.

## *Changes from P0156 to P0157*

B Master/Slave:
Voltage setting of each slave is only reduce with 0.25% when in parallel mode.

$ Master/Slave:
Powersink is automatically disabled when:
a) units are in mixed parallel/series mode. (both master and slaves)
b) unit is slave and in parallel mode.

## *Changes from P0155 to P0156*

B Setups:
In the front menu the selection of Setups was missing.

## *Changes from P0154 to P0155*

$ Simulator:
For the SM66-AR-110, the range of internal resistance simulation is increased to 0.327 Ohms.

## *Changes from P0153 to P0154*

B PROGAM:CATALOG:
Ethernet command PROGAM:CATALOG? returned one linefeed too many.

B PROGAM:SELECT:STEP ?
Ethernet command PROGAM: SELECT:STEP ? didn't return the sequence properly.

B *PUD?:
When the PUD does not contain data, only one linefeed is returned instead of two.

N INT MOD CON:
The four relay contacts can be linked to system status, like ACF, DCF, Output, etc.
(See page 5-7 of Ethernet+Sequencer manual: 'Relay-Status-Linkage').
Furthermore, the contacts can not only be controlled by Ethernet, but also from the web page.

$ Master/Slave:
Voltage setting of each Slave unit is set 0.25% lower than the Master.

$ Sequencer:
When the sequencer is linked to a programming source like Front, the front knobs will still be active, and the sequencer can manipulate these settings.
(See page 6-6 of Ethernet+Sequencer manual: 'selecting a programming source')

*Changes from P0152 to P0153*

N Terminator:
Ethernet commands can be terminated by a linefeed, carriage return or both.

N Stepsize:
Via Ethernet commands the digital step size of the voltage and current programming can be queried.

$ Manual:
Content of the manual is updated.

B PowerSink:
Version P0152 disabled the PSOL-signal. Fixed in this version.

*Changes from P0150 to P0152* *Highly recommended*

N Local button:
Press and hold the output on/off button to force to local operation.

N Supervisor info:
Via the front menu the supervisor information is shown in case of internal errors.

$ Temperature:
Better temperature sensor handling.

$ Non-volatile memory:
'Self-healing' memory management. This prevents for 'safe-mode' in harsh environments.

B Master/Slave:
Correctly restoring power-on settings when in M/S mode.

*Changes from P0114 to P0150*

N Master/Slave:
The optional interface module INT MOD M/S is now supported.

B Non-volatile memory:
During the saving of sequences to non-volatile memory incorrect info was shown.

B TCP/IP connections:
Connection was lost when empty or bogus packages were received.

B Negative Current Sequencer:
Compare-commands of the sequencer can process negative output currents now.

*Changes from P0113 to P0114*

N Simulator:
The optional interface module INT MOD SIM is now supported.

N Powersink control:
The powersink settings can be controlled via the front panel as well.

$ Firmware update protection:
Updating the firmware can be protected by a password.

B TCP/IP connections:
Connection was closed when communication sessions had long intervals in between.

B ProgramOpenEndError:
This status bit wasn't cleared after deleting the invalid sequence .

*Changes from P0112 to P0113*

B Output status on front:
When the front panel is in lock mode, the output on/off text wasn't refreshed anymore.

$ Sequencer information:
On the web server, more information is displayed in case too much labels are uploaded.

$ TCP/IP connections:
A much faster re-connection in case of broken cable links.

*Changes from P0111 to P0112*

B Start-up at low temperatures:
At low temperatures (below 0 degrees Celsius) and single phase input, some units will not start-up properly. ACF signal is displayed and it can take minutes before the unit is ready to use.

*Changes from P0110 to P0111*

N Extra info in front menu:
The front menu is extended with information about the serial number and the PUD text.

N Powersink control via Ethernet commands:
New Ethernet commands have been added to edit the settings of a built-in Powersink.

N Sequencer line number:
Introduction of difference between next sequence line number and active sequence line number. Available via Ethernet commands and the web console.

$ Temperature sensor detection:
A more selective detection method of the internal temperature sensors.

B Powersink settings restore:
In certain cases the settings of the Powersink had to be restored by hand after power-up cycles.

B Sequence load crashes:
When sequences were uploaded and deleted in an intensive manner, the sequencer could crash.

B Sequence with labels started conditionally:
When sequences, containing text labels, were started conditionally via INT MOD DIG, the sequencer crashed.

B Large Ethernet packages caused command loss:
When a lot of commands were send at once so they didn't fit into one Ethernet package (max 1024 bytes), some commands were lost.

*Changes from P0109 to P0110*

N Highlight function:
This feature allows the user to identify the unit in an audiovisual way. This feature is available via the web server or via an Ethernet command. The front panel display of the unit will blink several times and a sound signal is generated at the same moment.

N Voltage and current limits:
The methods to control the voltage and current limits is extended. Besides the front panel menu, it is also possible to adjust the limits via the web server and Ethernet commands.

N Sequence trigger:
So far the sequence trigger function was only available via an Ethernet command. From this release on this function is also accessible via the web server's sequencer console.

$ Overload indicators:
The web server will now indicate whether or not the analogue inputs of an Int Mod Ana are overloaded (if installed).

B PROG:SEL:STEP?:
This Ethernet command did not behave properly in case of sequences that were triggered via digital inputs (via Int Mod Dig).

B *PUD?:
This Ethernet command returned bad characters if *PUD was never programmed before.

B Password:
The password change option on the web server was not limited to the correct maximum length.

*Changes from P0108 to P0109*

N Communication WatchDog:
This feature checks if the Ethernet communication and commands are valid and received in time. If not, the output of the power supply is switched off.

$ PFC regulation for Uin > 500Vac:
The regulation is improved for high input voltages. Reduces noise on the input and extends the power components life time.

$ PFC safety routines:
In extreme circumstances (e.g. very high input voltages, over temperatures, etc) the safety routines respond to the situation more gentle.
The previous routines were save as well, but quite brutal.

$ Internal auxiliary voltage checks:
The number of checks of internal analogue signals is expended.

B Web Server fan speed:
Fan speeds close to the maximum result in true rpm in stead 0 rpm.

B Ethernet command *sav:
In case of missing PUD (Protected User Data), this command returned an error.
This is fixed by creating an empty string when PUD is missing.

B Web Server backlight intensity limits:
Limits made equal to the limits of the front menu.

B Web Server Interface text:
For the Int Mod Ana, the wrong text was displayed for pin 6. This is changed to the correct text: “PSOL”.