

Technical Notes

SIO-Commands





Firmware: 24.14 Update: 04.05.2023

Changes from FW 24.14 in comparison to the FW 24.13 are marked in green

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Command:?

SFC>?

Description:

Help menu for public commands. Displays a list of possible commands.

Response:

CommandI descriptionBATI Manage battery.CARTI Manage fuel cartridge.CTRLI Control system.

0,01,5

CYCLE | Display and manage cycle monitor database.

ERROR | Display recent error log entries.

ERRORSTAT | Display error statistic.
ETH | Control Ethernet.

FACTORY | Reset system to factory defaults.
FM | Control the fuel manager if present.

INFO | Display system information.LIFE | Display lifetime log database.LOG | Display system operating data.

RESET | Perform system reset.
REV | Display firmware revision.

RTC | Display or set UTC time and date.

SERIAL | Display system serial number.

TLP | Control and monitor transport protection.

UNLOCK | Unlock transport protection.

VER | Display firmware version.

WARNING | Display recent warning log entries.





Command: BAT

SFC>BAT <ARGUMENT>

Description:

Set or view parameters of battery.

Possible transmission parameters:

Argument	Description
	Display parameters of the currently configured battery
(value)	Configure battery by: 1: Lead Acid 12V 2: Lead Acid 24V 3: LiFePO4 12V 4: LiFePO4 24V 5: EFOY Battery
LIST	Display all configurable batteries and their respective IDs.
LIMITS	Display minimum, maximum and default values for each configurable battery parameter of the currently configured battery.
DEFAULT	Reset all battery parameters except capacity to their default values.
ВОС	Display currently configured begin of charge voltage (=switch-on voltage).
BOC LIMITS	Display configurable range of the begin of charge voltage (=switch-on-voltage).
BOC [value]	Configure begin of charge voltage (=switch-on-voltage) with a desired value.
EOC	Display currently configured end of charge voltage (=switch-off voltage).
EOC LIMITS	Display configurable range of the end of charge voltage (=switch-off voltage).
EOC [value]	Configure end of charge voltage (=switch-off voltage) with a desired value.
COC	Display currently configured cut-off current (=switch-off current).
COC LIMITS	Display configurable range of the cut-off current (=switch-off current).
COC [value]	Configure cut-off current (=switch-off current) with a desired value.
CAP	Display currently configured battery capacity.
CAP LIMITS	Display configurable range of battery capacity.
CAP [value]	Configure battery capacity with a desired value.
COT	Display currently configured full charge duration (=switch-off time).



COTLIMITS	Display configurable range of the full charge duration (=switch-off time).
COT [value]	Configure full charge duration (=switch-off time) with a desired value in minutes.
MAXCT	Display currently configured maximum charge time.
MAXCT LIMITS	Display configurable range of the maximum charge time.
MAXCT [value]	Configure maximum charge time with a desired value in hours. Set to zero to disable maximum charge time.
MINCT	Display currently configured minimum charge time.
MINCT LIMITS	Display configurable range of the minimum charge time.
MINCT [value]	Configure minimum charge time with a desired value in minutes.
SOD	Display currently configured switch-on delay
SOD LIMITS	Display configurable range of switch-on delay.
SOD [value]	Configure switch-on delay with a desired value in seconds.
DDP	Display currently configured battery protection voltage.

Example 1

SFC>BAT

type: LiFeP04 12V

begin of charge voltage: 12.80V end of charge voltage: 14.60V

cut off current: 0.50A capacity: 105.00Ah cut off time: 0min

maximum charge time: 25h minimum charge time: 30min

switch on delay: 30s

deep discharge protection voltage: 11.90V

minimum voltage: 9.00V maximum voltage: 16.00V

maximum manual on voltage: 13.40V



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Example 2

SFC>BAT LIST

- 0: No Battery
- 1: Lead Acid 12V
- 2: Lead Acid 24V
- 3: LiFePO4 12V
- 4: LiFePO4 24V
- 5: EFOY Battery

Example 3

SFC>BAT BOC 12.7

Ok



Command: BAT INFO

Description:

Display operating values of a connected EFOY Battery. The command has no arguments.

Possible transmission parameters:

Argument	Description
	Display operating values of a connected EFOY Battery.
BatSoc	State of charge from the connected EFOY Battery
BatUClamp	Voltage measured at the clamps of the connected EFOY Battery
BatUChgMax	Maximum allowed charge voltage of the connected EFOY Battery
BatlChg	Charge current measured by the EFOY Battery
BatlChgMax	Maximum allowed charge current of the EFOY Battery
BatT	Temperature of the EFOY Battery
BatState	System state of the EFOY Battery 0 – battery may not be charged 1 – battery may be charged
BatCap	Total capacity of the EFOY Battery
BatCells	Number of battery cells in the EFOY Battery



Command: CART

SFC>CART <ARGUMENT>

Description:

Configure the fuel cartridge and display information about the fuel cartridge.

Possible transmission parameter:

Argument	Description
	Display Information about the current fuel cartridge. Please see the following table for a detailed description.
RESET	Reset the cartridge fuel level to 100%. Causes fuel cartridge empty error to be reset.
RESET [0 to 100]	Set the cartridge fuel level to a desired value between 0% and 100%. Causes fuel cartridge empty error to be reset.
NONE	Configure unspecified fuel cartridge. Disables computation of fuel level.
CUSTOM [1 to 1000]	Configure fuel cartridge with custom capacity between 1l and 1000l.
M5	Configure fuel cartridge type M5 containing 5 litres.
M10	Configure fuel cartridge type M10 containing 10 litres.
M28	Configure fuel cartridge type M28 containing 28 litres.
MT60	Configure fuel cartridge type MT60 containing 60 litres.
FM	Configure fuel manager.

Example 1

SFC>CART M10 Ok

Example 2

SFC>CART

Cart 2n CartCap 5.00l CartFLV 5.00l CartFL 100.00%





Designation	Description
Cart	Currently configured cartridge.
	0: unspecified
	1: fuel container with custom capacity
	2: M5
	3: M10
	4: M28
	5: MT60
	6: FM
CartCap	Capacity of the currently configured cartridge.
CartFLV	Remaining absolute volume in the currently configured fuel cartridge.
CartFL	Remaining relative volume in the currently configured fuel cartridge.



Command: CLUSTER

SFC>CLUSTER <ARGUMENT>

Description:

Configure cluster operation and display information regarding cluster operation.

Possible transmission parameters:

Argument	Description
	Display information regarding cluster operation. See possible values for output below.
ROLE	Display currently configured cluster role of the EFOY. 0: None / 1: Controller / 2: Client
ROLE LIST	Display the configurable role IDs and their short designation.
ROLE x	Configure cluster role of the EFOY in the cluster unit. Possible options for x are: 0: None / 1: Controller / 2: Client
IP	Display the currently configured IP address of the cluster controller. This is only relevant if the EFOY is configured as cluster client.
IP w.x.y.z	Configure the IP address of the cluster controller. This is only possible if the EFOY is configured as cluster client. The IP must be given as IPv4 in dot decimal notation, i.e. 192.168.172.10. The IP address 0.0.0.0 is not accepted.
MYIP	Display the IP address and subnet mask currently assigned to the EFOY.
PIN	Display the current pin. The pin "00000000" means there is no pin. If the EFOY is configured as cluster role "None", or as cluster role "Controller", display the cluster controller pin If the EFOY is configured as cluster role "Client" display the currently configured client pin.
PIN xxxxxxxx	Set the pin for the cluster client, only possible if the EFOY is configured as cluster role "Client". Possible options for x, all numerals from 0 to 9. It is mandatory that the pin has eight digits. The combination of eight times "0" is not allowed ("00000000"). The lowest allowed number is "000000001", the highest is "99999999"

Possible values for output:

Argument	Description
ClusterRole	Cluster role assigned to the EFOY. 0: None / 1: Controller / 2: Client
ClusterOpMode	Currently active cluster operation mode.





ClusterClientCnt Total number of cluster clients connected to the cluster controller. This value is only relevant if the EFOY is configured as cluster controller.

Example

SFC>CLUSTER

ClusterRole 1n ClusterOpMode 10n ClusterClientCnt 3n

SFC>CLUSTER ROLE

2

SFC>CLUSTER ROLE LIST

0 - None

1 - Controller

2 - Client

SFC>CLUSTER ROLE 1

0k

SFC>CLUSTER IP

192.168.172.10

SFC>CLUSTER IP 192.168.172.20

Uk

SFC>CLUSTER MYIP

IPv4: 192.168.172.11 Mask: 255.255.0.0

SFC>CLUSTER PIN

ClusterPin 38251347

SFC>CLUSTER ROLE 2

0k

SFC>CLUSTER PIN 01234567

0k



Command: CTRL

SFC>CTRL <ARGUMENT>

Description:

Changes the operation mode of the system.

Possible transmission parameters:

Argument	Description
ON	Turns system on. The system may not be turned on manually if the battery voltage is above the maximum manual on voltage (dependent on configured battery). Furthermore, the system may not be turned on manually if a connected fuel manager is inoperable due to an error.
OFF	Turns system to sleep-mode. System does not start charging operation automatically. If the system is currently running, it only shuts down after it ran for at least 30 minutes.
AUT0	Puts system in automatic standby mode. System will turn on automatically if the battery voltage falls below the configured begin of charge voltage (=switch-on voltage).

Example 1 SFC>CTRL ON

Ok

Note:

Whether the system may currently be turned on or off is reflected in the values SystemOnOk and SystemOffOk in the output off serial command LOG.





Command: CYCLE

SFC>CYCLE < ARGUMENT>

Description:

Displays the database of all cycle monitoring units and manages the cycle monitor.

Possible transmission parameters:

Argument	Description
	Displays cycle monitor database.
RESETALL	Reset all cycle monitoring units. The values average duration, last duration and count are set to zero. The cumulated cycle durations are not reset. Causes battery degraded error to be reset.
RESETAUTO	Reset the automatic charge cycle monitoring unit. The values average duration, last duration and count are set to zero. The cumulated cycle duration is not reset. Causes battery degraded error to be reset.
RESETMAN	Reset the manual charge cycle monitoring unit. The values average duration, last duration and count are set to zero. The cumulated cycle duration is not reset.

Example 1

SFC>CYCLE

AutoAvg 162min AutoLast 214min AutoCum 6h AutoCnt 2n ManAvg 71min ManLast 6min ManCum 17h ManCnt 10n DDPAvg 0min DDPLast 0min DDPCum 0h DDPCnt 0n FPAvg 0min FPLast 0min FPCum 0h FPCnt 0n ErrAvg 11min ErrLast 2min ErrCum 0h ErrCnt 2n RstAvg 11min RstLast 13min RstCum 0h RstCnt 3n

The cycle monitor database contains the following values:

Designation	Description
AutoAvg	Average cycle duration of automatic cycles.
AutoLast	Last automatic cycle duration.
AutoCum	Total duration of all automatic cycles.
AutoCnt	Total number of automatic cycles.





ManAvg	Average cycle duration of manual cycles.
ManLast	Last manual cycle duration.
ManCum	Total duration of all manual cycles.
ManCnt	Total number of manual cycles.
DDPAvg	Average cycle duration in deep discharge protection mode.
DDPLast	Last deep discharge protection cycle duration.
DDPCum	Total duration of all deep discharge protection cycles.
DDPCnt	Total number of cycles in deep discharge protection mode.
FPAvg	Average cycle duration in frost protection mode.
FPLast	Last frost protection cycle duration.
FPCum	Total duration of all frost protection cycles.
FPCnt	Total number of cycles in frost protection mode.
ErrAvg	Average duration of cycles aborted by an error.
ErrLast	Last duration of a cycle aborted by an error.
ErrCum	Total duration of all cycles aborted by an error.
ErrCnt	Total number of cycles aborted by an error.
RstAvg	Average duration of cycles aborted by a system reset.
RstLast	Last duration of a cycle aborted by a system reset.
RstCum	Total duration of all cycles aborted by a system reset.
RstCnt	Total number of cycles aborted by a system reset.



Command: ERROR

SFC>ERROR

Description:

Displays the error log. The error log is presented in newest first order and without any argument, it displays the last 10 errors.

Each error has a major and minor error number, a time and date when the error happened and the operating time when the error occurred. This information is followed by information that is relevant to the error in the same formatting as in the log output.

Possible transmission parameters:

Argument	Description
	Without any arguments, the command displays up to the last ten errors.
[number] (e.g. 20)	The command displays up to number last errors from the log.

Example 1

SFC>ERROR

001.006 2020-11-26T15:57:02Z: StackOpTime 25.3508h 001.006 2020-11-26T15:55:11Z: StackOpTime 25.3508h

Example 2

SFC>ERROR 1

001.006 2020-11-26T15:57:02Z: StackOpTime 25.3508h





Command: ERRORSTAT

SFC>ERRORSTAT

Description:

Displays a table giving an overview of all errors and warnings that have occurred. Contains the information which errors or warnings have occurred (Code), how often they were set (Count), when the error or warning has occurred for the first time (First) and the last time (Last) and the operating hours when the error or warning occurred for the first and last time (StFirst and StLast).

Example 1

SFC>ERRORSTAT

Code	Count	First	Last	StFirst	StLast
001.001	1	2020-06-29T12:49:01Z	2020-06-29T12:49:01Z	0h	0h
001.002	1	2020-06-29T12:49:48Z	2020-06-29T12:49:48Z	0h	0h
050.004	48	2020-06-29T13:14:58Z	2020-11-10T18:28:56Z	0h	25h
020.002	1	2020-07-02T09:31:14Z	2020-07-02T09:31:14Z	7h	7h
020.001	1	2020-07-07T09:06:42Z	2020-07-07T09:06:42Z	7h	7h
050.002	13	2020-07-09T11:17:15Z	2020-11-26T15:55:21Z	7h	25h
011.001	1	2020-07-20T14:02:44Z	2020-07-20T14:02:44Z	8h	8h
001.003	1	2020-08-18T12:27:35Z	2020-08-18T12:27:35Z	8h	8h
001.006	26	2020-08-26T06:47:34Z	2020-11-26T15:57:02Z	17h	25h
195.001	5	2020-11-23T10:41:28Z	2020-11-23T13:17:31Z	25h	25h



Command: ETH

SFC>ETH <ARGUMENT>

Description:

Displays or sets the Ethernet configuration.

Possible transmission parameters:

Argument	Description
	Display DHCP client state, IP, mask, gateway, hardware address, device name
DHCP [ON OFF]	Turn DHCP client on or off. Renew DHCP with ON command.
SET (IP) (Mask) (Gateway)	Set the current IP configuration, DHCP must turned off before.
CLAIMING	Get claiming key if one is set and not expired.
MODBUS [ON [<port>] OFF]</port>	Caution: The mode opens an unsecure port into the network and thus requires a secure local network with firewall, otherwise there are great risks for attacks on the EFOY. Enables the unsecure Modbus mode at user defined port. (Default port is 502). EFOY must reset after turn off command to disable the Modbus mode or after changing the port.
CN	Common name (Device name)
RXER	Error counter, irrelevant to end user
LINK	Physical link and DCHP client state

Example 1

SFC>ETH

Ethernet cable connected Connected to IoT Hub DHCP client: On

DHCP client: On IP: 10.1.6.56 Mask: 255.255.0.0

Gateway: 10.1.255.1

Hardware Address: E4:1E:0A:6F:AC:B1





Command: FACTORY

SFC>FACTORY

Description:

Reset the system settings to factory defaults. The command only has an effect if the system is in sleep-mode, in standby or in transport protection.

A factory reset causes the battery configuration, the cycle monitor units, the fuel cartridge configuration and the Ethernet configuration to be reset to default.

Example 1 SFC<FACTORY Ok



Command: FM

SFC>FM <ARGUMENT>

Description:

This function is used to configure and display specific information about the Fuel Manager.

Possible transmission parameters:

Argument	Description
	Display overview of the current Fuel Manager configuration
[Port number] RESET	Reset fuel level of the cartridge on port number.
[Port number] RESET [level]	Reset fuel level of the cartridge on port number to level.
[Port number] ENABLE	Enable the port to be used
[Port number] DISABLE	Disable the port to not be used.
[Port number] [Cartridge type]	Change cartridge to type.
[Port number] SELECT	Set the active port. (The port must be enabled.)
[Port number] CUSTOM [1 to 1000]	Configure fuel cartridge with custom capacity be-tween 1l and 1000l.
ERROR	Display the error log, it is presented in newest first order and it displays the last 10 errors. Each error hast a major and minor error number, a valid time stamp or a zeroed time stamp when it is not valid. And the total operating hours of the Fuel Manager.

Example 1 (FM 2 connected)

SFC<FM

ActivePort 1n P1Cart 1n P1Enable 1n P1Capacity 5l P1Filllevel 50% P2Cart 0n P2Enable 0n P2Capacity 0l P2Filllevel 0% FMDErrMajor 0n FMDErrMinor 0n LevelSensor 1n TFmd 24.6C FMDSysOpTime 262.4644h FMD0pTime 63.0692h

Designation	Description
ActivePort	The currently active port of the Fuel Manager. This cartridge will be used up.
P[n]Cart	Cartridge type configured for the Port with number n. See CART for more information.





P[n]Enable	If the Port n will be used by the Fuel Manager or not.
P[n]Capacity	Capacity of the cartridge that is configured on Port n.
P[n]Filllevel	Current fill level of the cartridge on the Port n.
FMDErrMajor	Current Major Error code from the Fuel Manager
FMDErrMinor	Current Minor Error code from the Fuel Manager
LevelSensor	Current status from the Fuel Cartridge Sensor
TFmd	Fuel Manager temperature
FMDSys0pTime	Runtime from the Fuel Manager in hours
FMD0pTimer	Operation time from the Fuel Manager in hours

Example 2 (no FM available)

SFC<FM

FM 0n



Command: INFO

SFC>INFO

Description:

Display information about system type, system serial number and firmware version.

Example 1

SFC<INFO

Type: EFOY 150

Serial: 430200-2025-50508

Firmware: 24.06.161



Command: LIFE

SFC>LIFE

Description:

Displays the lifetime log database. Lifetime log entries are added automatically in a fixed interval of stack operating time.

This command is for internal use only



Command: LOG

SFC>LOG

Description:

Display measurement values, system operating information and status. The command has no arguments.

Example 1

SFC<LOG

POut -0.65W UBat 13.33V UOut 12.74V IOut -0.05A TAmb 23.3C TStack 23.5C THE 23.7C TMeOH 24.4C pDifComp 0.00hPa pAmb 952.86hPa RH 48.8% FL 76.3% MeOHTotal 1.45l DSV 305ul FilltimeTotal 7.48s SysOpTime 1344.6667h StackOpTime 26.5297h SystemStarts 98n StackStarts 19n WOutCum 1807Wh SystemState 0n DmfcState 0n DmfcPhase 0n StackState 0n StackOcvState 4n StackCtrl 0n HTState 0n SystemOn 1n SystemOff 1n SystemOffOk 0n SystemOnOk 1n UserMode 1n BatSoc -1% TStackMin 16.3C TStackMinTime 20201110.172447n TStackMax 74.5C TStackMaxTime 20201019.091004n ActiveErrors 0n Error 0n ErrorMinor 0n ErrorTime 20201019.091004n LastError 1n LastErrorMinor 6n LastErrorTime 20201019.091004n ActiveWarnings 0n Warning 0n WarningMinor 0n WarningTime 20201019.091004n LastWarning 151n LastWarningMinor 1n LastWarningTime 20201019.091004n SystemTime 20201127.140047n

Designation	Description
POut	Output power.
UBat	Battery voltage.
UOut	Output voltage.
lOut	Output current.
TAmb	Ambient temperature.
TStack	Stack temperature.
THE	Heat exchanger temperature.
TMeOH	Methanol temperature.
pDifComp	Compensated differential pressure. The zero point offset is taken into consideration.
pAmb	Ambient pressure.
RH	Relative humidity.





FL	Fill level of the fluid in the internal system (intermediate tank + tubes).
MeOHTotal	Total methanol consumption.
DSV	Internal value
FilltimeTotal	Internal value
Sys0pTime	System operating time (hours the system is connected to a battery)
StackOpTime	Total operation time in charging mode.
SystemStarts	Number of system starts.
StackStarts	Number of stack starts.
WoutCum	Cumulated power emitted by the system.
SystemState	State of the system state machine (0 =off, 1 =standby, 2 = in operation, 3 = shut down, 4 = frost protection, 5 = deep discharge protection, 6 = transport lock procedure, 7 = transport lock, 8 = reset, 9 = factory defaults, 10 = error, 11 = frost protection, 12 = pending, 13 = pending, 14 = update EFOY accessories)
DmfcState	Internal value
DmfcPhase	Operation phase of the DMFC (0 = idle, 1 = start phase, 2 = charging).
StackState	Internal value
Stack0cvState	Internal value
StackCtrl	Internal value
HTState	Internal value
System0n	Reason the system has turned on: 0: None 1: System has been turned on manually. 2: The system has turned on automatically because the battery required charging. 3: The system has turned on automatically to enter frost protection mode. 4: The system turned on automatically to enter deep discharge protection mode.
SystemOff	Reason the system has turned off: 0: None 1: System has been turned off manually. 2: The system turned off automatically because the battery has been fully charged. 3: The system has turned off automatically because the maximum charge time has been reached. 4: The system has turned off automatically because an overvoltage at the output was detected. 5: The system has turned off because frost protection mode has finished. 6: The system has turned off because the fuel cartridge has depleted. 7: The system has turned off because methanol in reservoir and tubes is depleted for UN3363 requirement. 8: The system has turned off because an error has occurred.





9: The system was reset.

System0ff0k	Indicates whether the system may currently be turned off manually (0 = not permitted, 1 = permitted).
System0n0k	Indicates whether the system may currently be turned on manually (0 = not permitted, 1 = permitted).
UserMode	System operating mode requested by user. (0 = automatic, 1 = off, automatic by default).
BatSoc	State of charge of the battery. Only available for smart batteries.
TStackMin	Minimum stack temperature.
TStackMinTime	Minimum stack temperature time stamp.
TStackMax	Maximum stack temperature.
TStackMaxTime	Maximum stack temperature time stamp
ActiveErrors	Number of currently active errors
Error	Currently active error (major error code)
ErrorMinor	Currently active error (minor error code)
ErrorTime	RTC date and time (UTC) when the currently active error was set.
LastError	Previously active error (major error code)
LastErrorMinor	Previously active error (minor error code)
LastErrorTime	RTC date and time (UTC) when the previously active error was set.
ActiveWarnings	Number of currently active warnings.
Warning	Currently active warning (major error code)
WarningMinor	Currently active warning (minor error code).
WarningTime	RTC date and time (UTC) when the currently active warning was set.
LastWarning	Previously active warning (major error code).
LastWarningMinor	Previously active warning (minor error code).
LastWarningTime	RTC date and time (UTC) when the previously active warning was set.
SystemTime	System time (UTC) in the format YYYYMMDD.hhmmss.

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Command: RESET

SFC>RESET

Description:

Resets the system. The command has no arguments.

Example 1

SFC>RESET

SIO-Commands EFOY 24.14



Command: REV

SFC>REV

Description:

Displays the firmware revision. The command has no arguments.

Example 1

SFC>REV

Rev 161n



Command: RTC

SFC>RTC <ARGUMENT>

Description:

Display or set the current UTC time. Do not use CET (Central European Time) or CEST (Central European Summer Time)!

Possible transmission parameters:

Argument	Description
	Display current UTC time
[YYYY]-[MM]-[DD] [hh]:[mm]:[ss]	Set current UTC time

Example 1 SFC>RTC

Current time: 2020-12-08T10:18:25Z UTC 617ms

Example 2

SFC>RTC 2020-12-08 10:21:45

Current time: 2020-12-08T10:21:45Z UTC 0ms



Command: SERIAL

SFC>SERIAL

Description:

Displays the configured system serial number and stack. The command has no arguments.

Example 1

SFC>SERIAL

efoy: 430200-2025-50508 stack: 158010003-44



Command: TLP

SFC>TLP <ARGUMENT>

Description:

Control and monitor the transport protection. The transport protection may only be initiated when the system is in operation, standby or sleep-mode.

The transport protection may only be aborted while it is already active or while the system is still in charging operation. Otherwise the command is rejected.

Possible transmission parameters:

Argument	Description
	Displays the current state of the transport protection procedure state machine
	On = deactivated
	1n = transport protection was aborted manually
2n = transport protection has failed 3n = activated 4n – 7n = transport protection is carried out	2n = transport protection has failed
	3n = activated
	4n - 7n = transport protection is carried out
START	Initiate the transport protection while in standby, off or in operation.
ABORT	Abort the active transport protection.

Example 1

SFC>TLP
TLPState On

Example 2

SFC>TLP START

0k

Example 3

SFC>TLP

TLPState 4n

Example 4

SFC>TLP ABORT

0k





Command: UNLOCK

SFC>UNLOCK

Description:

Deactivate the transport protection mode. The command is rejected when the system is not in transport protection mode.

Example 1 SFC<UNLOCK OK

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Command: VER

SFC>VER

Description:

Displays the firmware version. The command has no arguments.

Example 1

SFC>VER

Firmware EFOY 150 24.06C12V/24V QB date 2020-11-06



Command: WARNING

SFC>WARNING <ARGUMENT>

Description:

List the codes and UTC timestamps of last warnings that occurred.

Possible transmission parameters:

Argument	Description	
	Without an argument the last 10 warning log entries or all available warning log entries, if there are less than ten, are displayed.	
number, e.g. 20	Display the desired number of the warning log entries. If there are less than the specified warning log entries, only the available entries are shown.	

Example 1

SFC>WARNING

Code	Timestamp	Stack0pTime
195.001	2020-11-23T13:17:31Z	25h
195.001	2020-11-23T13:17:23Z	25h
195.001	2020-11-23T10:45:58Z	25h
195.001	2020-11-23T10:44:25Z	25h
195.001	2020-11-23T10:41:28Z	25h

Example 2

SFC>WARNING 3

Code	Timestamp	Stack0pTime
195.001	2020-11-23T13:17:31Z	25h
195.001	2020-11-23T13:17:23Z	25h
195.001	2020-11-23T10:45:58Z	25h

