Eltex-Elektrostatik-Gesellschaft mbH
Blauenstrasse 67-69, D-79576 Weil am Rhein
Phone 07621 / 79 05-431
Email info@eltex.de

PROFINET Protocol Description POWER CHARGER

Interface description

The generators of the POWER CHARGER family support a PROFINET-based Ethernet interface.

Configuration of network parameters

By default, the DHCP protocol is activated for the configuration of the network parameters (IP address, submask, gateway etc.). The parameters can be changed manually using the “IPConfig” program by HMS. This tool can also be used to search the entire network for available devices. For more information and to download the program see http://www.anybus.de/.

Grouping of I/O data

The available I/O data of the interface is divided into two groups. The actual values are assigned to a group that is transmitted at regular intervals. See the appropriate device description file (DDF). All other data is only transmitted on request / writeable as parameters.

All available data (including the regularly transmitted process data) can be read by the user on request. The data is always organized in the same slot. Only the access index changes.
The following settings must be defined for access:

PROFINET Parameter	Wert
Slot	0
Subslot	1

Overview of the “Device Information” index

The device information (e.g., serial number, device type etc.) is available in the following indices:

Index	Name
256 (0x0100)	Order Code
257 (0x0101)	Serial Number
258 (0x0102)	Revision Number Hardware
259 (0x0103)	Revision Number Software

Overview of the “Software Reset” index

Index	Name
260 (0x0104)	Software Reset

Eltex-Elektrostatik-Gesellschaft mbH
Blauenstrasse 67-69, D-79576 Weil am Rhein
Phone 07621 / 79 05-431
Email info@eltex.de

PROFINET Protocol Description POWER CHARGER

Overview of the “Error and Warning History” index

Index	Name
261 (0x0105)	Fehlerhistorie
262 (0x0106)	Warnungshistorie

Overview of the “Actual Values - Charging” index

The following table lists all indices used for the actual values relating to charging. These values are also marked as process data for regular transmission. See the DDF for more information.

Index	Name
10 (0x000A)	System Status
11 (0x000B)	Active Error
12 (0x000C)	Active Warning
13 (0x000D)	Supply Power Capacity
14 (0x000E)	Charging Power Capacity
15 (0x000F)	Charging Voltage Capacity
16 (0x0010)	Charging Current Capacity
17 (0x0011)	Pollution Charging
18 (0x0012)	Temperature Power Stage
19 (0x0013)	Temperature Intern
20 (0x0014)	Temperature Cascade
21 (0x0015)	Supply Voltage
22 (0x0016)	Supply Current
23 (0x0017)	Supply Power
24 (0x0018)	Charging Voltage
25 (0x0019)	Charging Current
26 (0x001A)	Charging Power
27 (0x001B)	Charging Mode
28 (0x001C)	Strong Sparks Error Counter
29 (0x001D)	Strong Sparks Warning Counter
30 (0x001E)	Weak Sparks Error Counter
31 (0x001F)	Weak Sparks Warning Counter
32 (0x0020)	Load Resistor Charging
40 (0x0028)	Years Operating Hour
41 (0x0029)	Days Operating Hour
42 (0x002A)	Hours Operating Hour
43 (0x002B)	Minutes Operating Hour
44 (0x002C)	Years Charging Hour
45 (0x002D)	Days Charging Hour
46 (0x002E)	Hours Charging Hour
47 (0x002F)	Minutes Charging Hour

Eltex-Elektrostatik-Gesellschaft mbH
Blauenstrasse 67-69, D-79576 Weil am Rhein
Phone 07621 / 79 05-431
Email info@eltex.de

PROFINET Protocol Description POWER CHARGER

Overview of the "Actual Values – Discharging" index

These actual values are only available in devices of the type PC__/A. In other devices, these values always equal zero.

The following table lists all indices used for the actual values relating to discharging. These values are also marked as process data for regular transmission. See the DDF for more information.

Index	Name
128 (0x0080)	Discharging Capacity
129 (0x0081)	Status Discharge 1
130 (0x0082)	Status Discharge 2
131 (0x0083)	Temperature Discharging
132 (0x0084)	Voltage Discharging
133 (0x0085)	AC Current Discharging
134 (0x0086)	DC Current Discharging
135 (0x0087)	Power Discharging
136 (0x0088)	Discharging Mode
137 (0x0089)	Power Discharge 1
138 (0x008A)	Power Discharge 2
141 (0x008D)	Years Discharging Hour
142 (0x008E)	Days Discharging Hour
143 (0x008F)	Hours Discharging Hour
144 /0x0090)	Minutes Discharging Hour

Overview of the "Acknowledgment of Errors and Warnings" index

The following indices are used to acknowledge error and warning messages.

Index	Name
50 (0x0032)	Clear Error
51 (0x0033)	Clear Warning

Overview of the "Save and Reset Parameters" index

The following indices are used to save and reset parameters.

Index	Name
52 (0x0034)	Save Parameter
53 (0x0035)	Load Factory Settings

Eltex-Elektrostatik-Gesellschaft mbH
Blauenstrasse 67-69, D-79576 Weil am Rhein
Phone 07621 / 79 05-431
Email info@eltex.de

PROFINET Protocol Description POWER CHARGER

Overview of the “Charging Parameters” index

The following table lists all indices used for the charging parameters.

Index	Name
60 (0x003C)	HV Release Mode Software
61 (0x003D)	Analog Setpoint
62 (0x003E)	Voltage Setpoint Charging
63 (0x003F)	Current Setpoint Charging
64 (0x0040)	Power Setpoint Charging
65 (0x0041)	Setpoint Percent Charging
66 (0x0042)	Voltage Limit Minimum Charging
67 (0x0043)	Voltage Limit Maximum Charging
68 (0x0044)	Current Limit Minimum Charging
69 (0x0045)	Current Limit Maximum Charging
70 (0x0046)	Operating Mode
71 (0x0047)	Ramp Time
72 (0x0048)	Current Width Factor
73 (0x0049)	Web Width
74 (0x004A)	Web Width Minimum
75 (0x004B)	Web Width Maximum
76 (0x004C)	Strong Sparks Level
77 (0x004D)	Weak Sparks Level
78 (0x004E)	Sparks Counter Limit
79 (0x004F)	Pollution Detection Charging
80 (0x0050)	Nominal Resistor Charging
81 (0x0051)	Limiter Warning
82 (0x0052)	Keyboard Lock
83 (0x0053)	LED Bar Mode

PROFINET Protocol Description POWER CHARGER

Overview of the “Discharging Parameters” index

The following table lists all indices used for the discharging parameters.

These indices are only available in devices of the type PC__/A. In other devices, these parameters always equal zero.

Index	Name
160 (0x00A0)	Voltage Setpoint Discharging
161 (0x00A1)	Current Setpoint Discharging
162 (0x00A2)	Power Setpoint Discharging
164 (0x00A3)	Percent Setpoint Discharging
164 (0x00A4)	Discharging Mode
167 (0x00A7)	Discharging Adjustment
168 (0x00A8)	Discharging Frequency
169 (0x00A9)	Software Release Discharging
170 (0x00AA)	Pollution Detection Discharging
171 (0x00AB)	Nominal Power Discharge 1
172 (0x00AC)	Nominal Power discharge 2

Overview of the “Release” index

The following index is used to control the release:

Index	Name
1 (0x0001)	HV Release

PROFINET Protocol Description POWER CHARGER

Description of the indices

Index 1 (0x0001) – HV Release

Release of the high voltage.

If the “Fieldbus Ethernet” interface was selected for the release (index 60), the software release for the high voltage is set/canceled with a write access. The high voltage is activated as soon the hardware release for charging/discharging is active.

- 0x0000 – Canceling of the software release
- 0x000F – Setting of the software release

Slot	0
Subslot	1
Index	1
Datenlänge	2 Bytes
Name	HV Release
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	0x0000
Low Limit	0x0000
High Limit	0x000F

PROFINET Protocol Description POWER CHARGER

Index 10 (0x000A) – System Status

Current system status of the generator. The status information consists of several parts:

- Bit 0 – high voltage release
  0 – high voltage deactivated
  1 – high voltage activated
- Bit 1 – error
  0 – no error
  1 – an error has occurred
- Bit 2 – warning
  0 – no warning
  1 – a warning has been issued
- Bit 3 – charging
  0 – charging inactive
  1 – charging active
- Bit 4 – discharging
  0 – discharging inactive (or passive mode in case of an active discharge)
  1 – discharging active
- Bit 5 – software release
  0 – no software release
  1 – software release set
- Bit 6 – pollution monitor calibration, charging
  0 – pollution monitor calibration inactive
  1 – pollution monitor calibration active

Slot	0
Subslot	1
Index	10
Datenlänge	2 Bytes
Name	System Status
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 11 (0x000B) – Active Error

Error number of the active error message. See the chapter “Error messages” in the operating manual for more information.

Slot	0
Subslot	1
Index	11
Datenlänge	2 Bytes
Name	Active Error
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 12 (0x000C) – Active Warning

Error number of the active warning message. See the chapter “Warning messages” in the operating manual for more information.

Slot	0
Subslot	1
Index	12
Datenlänge	2 Bytes
Name	Active Warning
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 13 (0x000D) – Supply Power Capacity

Capacity utilization of the power supply in percent.

Slot	0
Subslot	1
Index	13
Datenlänge	2 Bytes
Name	Supply Power Capacity
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 14 (0x000D) – Charging Power Capacity

Capacity utilization of the charging power in percent.

Slot	0
Subslot	1
Index	14
Datenlänge	2 Bytes
Name	Charging Power Capacity
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 15 (0x000F) – Charging Voltage Capacity

Capacity utilization of the charging voltage in percent.

Slot	0
Subslot	1
Index	15
Datenlänge	2 Bytes
Name	Charging Voltage Capacity
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 16 (0x0010) – Charging Current Capacity

Capacity utilization of the charging current in percent.

Slot	0
Subslot	1
Index	16
Datenlänge	2 Bytes
Name	Charging Current Capacity
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 17 (0x0011) – Pollution Charging

Pollution of the charging electrode in percent. In order for the pollution to be calculated, the pollution monitor must be activated via the parameter (index 79). The pollution monitor must be calibrated or a nominal charging resistance (index 80) must be defined.

Slot	0
Subslot	1
Index	17
Datenlänge	2 Bytes
Name	Pollution Charging
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 18 (0x0012) – Temperature Power Stage

Temperature of the power stage for charging in °C

Slot	0
Subslot	1
Index	18
Datenlänge	2 Bytes
Name	Temperature Power Stage
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 19 (0x0013) – Ambient Temperature

Internal housing temperature in °C

Slot	0
Subslot	1
Index	19
Datenlänge	2 Bytes
Name	Ambient Temperature
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 20 (0x0014) – Temperature Cascade

Temperature of the high-voltage cascade for charging in °C

Slot	0
Subslot	1
Index	20
Datenlänge	2 Bytes
Name	Temperature Cascade
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 21 (0x0015) – Supply Voltage

Supply voltage in mV.

Slot	0
Subslot	1
Index	21
Datenlänge	2 Bytes
Name	Supply Voltage
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 22 (0x0016) – Supply Current

Supply current in mA.

Slot	0
Subslot	1
Index	22
Datenlänge	2 Bytes
Name	Supply Current
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 23 (0x0017) – Supply Power

Supply power in W with one decimal place (the value 725 corresponds to 72.5W).

Slot	0
Subslot	1
Index	23
Datenlänge	2 Bytes
Name	Supply Power
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 24 (0x0018) – Charging Voltage

Charging voltage in V.

Slot	0
Subslot	1
Index	24
Datenlänge	2 Bytes
Name	Charging Voltage
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 25 – Charging Current

Charging current µA.

Slot	0
Subslot	1
Index	25
Datenlänge	2 Bytes
Name	Charging Current
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 26 (0x1A) – Charging Power

Charging power in W with one decimal place (the value 725 corresponds to 72.5W).

Slot	0
Subslot	1
Index	26
Datenlänge	2 Bytes
Name	Charging Power
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 27 (0x001B) – Charging Mode

Operating mode for charging.
The information regarding the operating mode is divided into two parts. The lower-value byte represents the currently active mode. The higher-value byte represents the charging limitations.

- Charging mode
  3 – voltage-constant mode (U-Const)
  4 – current-constant mode (I-Const)
  5 – operating mode: ESA foil
  6 – operating mode: ESA paper
  7 – operating mode: ESA metallized stock
- Charging limitations
  Bit 8 – voltage limitation
  0 – voltage limitation inactive
  1 – voltage limitation active
  Bit 9 – current limitation

0 – current limitation inactive
1 – current limitation active
Bit 10 - power limitation
0 – power limitation inactive
1 – power limitation active

Slot	0
Subslot	1
Index	27
Datenlänge	2 Bytes
Name	Charging Mode
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 28 (0x001C) – Strong Sparks Error Counter

Error counter for strong sparks.

Slot	0
Subslot	1
Index	28
Datenlänge	2 Bytes
Name	Strong Sparks Error Counter
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 29 (0x001D) – Strong Sparks Warning Counter

Warning counter for strong sparks.

Slot	0
Subslot	1
Index	29
Datenlänge	2 Bytes
Name	Strong Sparks Warning Counter
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 30 (0x001E) – Weak Sparks Error Counter

Error counter for weak sparks.

Slot	0
Subslot	1
Index	30
Datenlänge	2 Bytes
Name	Weak Sparks Error Counter
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 31 – Weak Sparks Warning Counter

Warning counter for weak sparks.

Slot	0
Subslot	1
Index	31
Datenlänge	2 Bytes
Name	Weak Sparks Warning Counter
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 32 (0x0020) – Load Resistance Charging

Load resistance for charging in Ω.

Slot	0
Subslot	1
Index	32
Datenlänge	4 Bytes
Name	Load Resistor Low Half Word
Data Type	UNSIGNED32
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 40 (0x0028) – Years Operating Hour

Years of the operating hours counter.

Slot	0
Subslot	1
Index	40
Datenlänge	2 Bytes
Name	Years Operating Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 41 (0x0019) – Days Operating Hour

Days of the operating hours counter.

Slot	0
Subslot	1
Index	41
Datenlänge	2 Bytes
Name	Days Operating Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 42 (0x002A) – Hours Operating Hour

Hours of the operating hours counter.

Slot	0
Subslot	1
Index	42
Datenlänge	2 Bytes
Name	Hours Operating Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 43 (0x002B) – Minutes Operating Hour

Minutes of the operating hours counter.

Slot	0
Subslot	1
Index	43
Datenlänge	2 Bytes
Name	Minutes Operating Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 44 (0x002C) – Years Charging Hour

Years of the charging hours counter.

Slot	0
Subslot	1
Index	44
Datenlänge	2 Bytes
Name	Years Charging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 45 (0x002D) – Days Charging Hour

Days of the charging hours counter.

Slot	0
Subslot	1
Index	45
Datenlänge	2 Bytes
Name	Days Charging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 46 (0x002E) – Hours Charging Hour

Hours of the charging hours counter.

Slot	0
Subslot	1
Index	46
Datenlänge	2 Bytes
Name	Hours Charging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 47 (0x002F) – Minutes Charging Hour

Minutes of the charging hours counter.

Slot	0
Subslot	1
Index	47
Datenlänge	2 Bytes
Name	Minutes Charging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 50 (0x0032) – Clear Error

The selected error message is deleted after a successful internal check.

Slot	0
Subslot	1
Index	50
Datenlänge	2 Bytes
Name	Clear Error
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	0x0000
Low Limit	0x0000
High Limit	0xFFFF

Index 51 (0x0033) – Clear Warning

The selected warning message is deleted after a successful internal check.

Slot	0
Subslot	1
Index	51
Datenlänge	2 Bytes
Name	Clear Error
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	0x0000
Low Limit	0x0000
High Limit	0xFFFF

Index 52 (0x0034) – Save Parameter

The key 0x5A saves the entire parameter set with the current values.

Slot	0
Subslot	1
Index	52
Datenlänge	2 Bytes
Name	Save Parameter
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	0x0000
Low Limit	0x0000
High Limit	0xFFFF

Index 53 (0x0035) Load Factory Settings

A write access with the key 0xA5 loads the factory settings for the entire parameter set.

Slot	0
Subslot	1
Index	53
Datenlänge	2 Bytes
Name	Load Factory Settings
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	0x0000
Low Limit	0x0000
High Limit	0xFFFF

Index 60 (0x3C) – HV Release Mode Software

This parameter defines the software release for the high voltage via different options. The individual release options can be activated independently. High voltage output starts once the software release and appropriate hardware release have been set via the interface.

- Bit 0 – autostart
  0 – autostart inactive
  1 – autostart active (automatic setting of the software release after activation of the supply voltage)
- Bit 1 – analog setpoint
  0 – release via analog setpoint inactive
  1 – release via analog setpoint active (software release can be controlled via the selected analog setpoint)
- Bit 2 – HMI
  0 – release via HMI inactive
  1 – release via HMI active (release via touchscreen or membrane keyboard can be activated/deactivated)
- Bit 3 – CANopen®
  0 – release via CANopen® inactive
  1 – release via CANopen® active (software release can be controlled via the fieldbus)
- Bit 4 – Fieldbus Ethernet
  0 – release via Ethernet inactive
  1 – release via Ethernet active (software release can be controlled with a write access to index 1)

Slot	0
Subslot	1
Index	60
Datenlänge	2 Bytes
Name	HV Release Mode Software
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	4
Low Limit	0
High Limit	31

Index 61 (0x003D) – Analog Setpoint

Selection of the analog interface used to define the output voltage setpoint (U-Const mode) / output current setpoint (I-Const mode) for charging.

- 0 – analog interface inactive + limit status signal inactive
- 1 – current interface (0-20mA) active + limit status signal inactive
- 2 – voltage interface (0-10V) active + limit status signal inactive
- 3 – analog interface inactive + limit status signal active
- 4 – current interface (0-20mA) active + limit status signal active
- 5 – voltage interface (0-10V) active + limit status signal active

Slot	0
Subslot	1
Index	61
Datenlänge	2 Bytes
Name	Analog Setpoint
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	5

PROFINET Protocol Description POWER CHARGER

Index 62 (0x003E) – Voltage Setpoint Charging

Definition of the voltage setpoint for charging in V. The setpoint can be defined within the range of the two limits for the minimum (index 66) and maximum (index 67) output voltage.

By default, these limits are set at 5 % (minimum) and 100 % of the maximum output voltage for charging.

Slot	0
Subslot	1
Index	62
Datenlänge	2 Bytes
Name	Voltage Setpoint Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	5% Umax Charging
Low Limit	Voltage Limit Minimum Charging
High Limit	Voltage Limit Maximum Charging

Index 63 (0x003F) – Current Setpoint Charging

Definition of the current setpoint for charging in µA. The setpoint can be defined within the range of the two limits for the minimum (index 68) and maximum (index 69) output current.
By default, these limits are set at 5 % (minimum) and 100 % of the maximum output current for charging.

Slot	0
Subslot	1
Index	63
Datenlänge	2 Bytes
Name	Current Setpoint Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	100% Imax Charging
Low Limit	Current Limit Minimum Charging
High Limit	Current Limit Maximum Charging

PROFINET Protocol Description POWER CHARGER

Index 64 (0x0040) – Power Setpoint Charging

Parameter for the maximum available charging power. This parameter is write-protected. It is defined exclusively via internal values for temperatures and currents. The power value is shown with one decimal place (the value 725 corresponds to 72.5W).

For an optimum utilization of charging power, the generator should be installed in a cool and well-ventilated area.

Slot	0
Subslot	1
Index	64
Datenlänge	2 Bytes
Name	Power Setpoint Charging
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	100% Pmax Charging
Low Limit	
High Limit	

Index 65 (0x0041) – Setpoint Percent Charging

Definition of the voltage setpoint (U-Const mode) / current setpoint (I-Const mode) for charging in percent. Any change will result in a check of the new setpoint against the appropriate minimum and maximum limits and a limitation of the setpoint, if necessary.

Slot	0
Subslot	1
Index	65
Datenlänge	2 Bytes
Name	Setpoint Percent Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	
Low Limit	0
High Limit	100

PROFINET Protocol Description POWER CHARGER

Index 66 (0x0042) – Voltage Limit Minimum Charging

Minimum value of the voltage setpoint for charging in V. If the defined voltage setpoint is lower than the new minimum value, it will automatically be changed to the new minimum.

Slot	0
Subslot	1
Index	66
Datenlänge	2 Bytes
Name	Voltage Limit Minimum Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	5% Umax Charging
Low Limit	5% Umax Charging
High Limit	Voltage Limit Maximum Charging

Index 67 (0x0043) – Voltage Limit Maximum Charging

Maximum value of the voltage setpoint for charging in V. If the defined voltage setpoint is greater than the new maximum value, it will automatically be changed to the new maximum.

Slot	0
Subslot	1
Index	67
Datenlänge	2 Bytes
Name	Voltage Limit Maximum Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	100% Umax Charging
Low Limit	Voltage Limit Minimum Charging
High Limit	100% Umax Charging

PROFINET Protocol Description POWER CHARGER

Index 68 (0x0044) – Current Limit Minimum Charging

Minimum value of the current setpoint for charging in µA. If the defined current setpoint is smaller than the new minimum value, it will automatically be changed to the new minimum.

Slot	0
Subslot	1
Index	68
Datenlänge	2 Bytes
Name	Current Limit Minimum Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	50
Low Limit	50
High Limit	Current Limit Maximum Charging

Index 69 (0x0045) - Current Limit Maximum Charging

Maximum value of the current setpoint for charging in µA.

If the defined current setpoint is greater than the new maximum value, it will automatically be changed to the new maximum.

Slot	0
Subslot	1
Index	69
Datenlänge	2 Bytes
Name	Current Limit Maximum Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	100% Imax Charging
Low Limit	Current Limit Minimum Charging
High Limit	100% Imax Charging

PROFINET Protocol Description POWER CHARGER

Index 70 (0x0046) – Operating Mode

Definition of the operating mode for charging.

Depending on the selected operating mode, changes of the setpoint via the analog interface or changes to its percentage value (index 65) will influence the voltage/current setpoint for charging. The charging voltage is still controlled according to the three setpoints for voltage, current and power. This behavior is not affected by a change of operating mode.
In the event of a change, the parameter set may be adjusted automatically according to the operating mode.
The following operating modes can be selected:

- 3 – voltage-constant mode (U-Const)
- 4 – current-constant mode (I-Const)
- 5 – ESA foil mode
- 6 – ESA paper mode
- 7 – ESA metallized stock mode

Slot	0
Subslot	1
Index	70
Datenlänge	2 Bytes
Name	Operating Mode
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	3 (PCRT, PCSC) 4 (PCMT) 5 (PCTL)
Low Limit	3 (PCMT, PCRT, PCSC) 5 (PCTL)
High Limit	4 (PMT, PCRT, PCSC) 7 (PCTL)

PROFINET Protocol Description POWER CHARGER

Index 71 (0x0067) – Ramp Time

Parameter for the definition of the ramp time for charging in ms. When a release is set or a change is made, the parameter value determines the time required to reach the charging voltage/current setpoint.

Slot	0
Subslot	1
Index	71
Datenlänge	2 Bytes
Name	Ramp Time
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	500
Low Limit	100
High Limit	10000

Index 72 (0x0048) – Current Width Factor

Factor for calculating the current setpoint as a function of the defined web width (index 73). The value is given in µA/m. After the calculation, the system will check the value against the current limitations for charging (index 68 & 69).

Slot	0
Subslot	1
Index	72
Datenlänge	2 Bytes
Name	Current Width Factor
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	1000
Low Limit	100
High Limit	5000

PROFINET Protocol Description POWER CHARGER

Index 73 (0x0049) – Web Width

Definition of the web width / active length of the charging electrode in mm. The current setpoint is calculated as a function of the width and the conversion factor (index 72). The calculation is always followed by a check of the setpoint against the relevant limitations (index 68 & 69). If a web width is not defined (default value), the value is not calculated.
The parameter can be defined within the limits of the web width (index 74 and 75).

Slot	0
Subslot	1
Index	73
Datenlänge	2 Bytes
Name	Web Width
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	Web Width Minimum
High Limit	Web Width Maximum

Index 74 (0x004A) – Web Width Minimum

Definition of the minimum web width / active length of the charging electrode in mm. If the selected web width is smaller than the new minimum value, the web width and current setpoint are automatically corrected.

Slot	0
Subslot	1
Index	74
Datenlänge	2 Bytes
Name	Web Width Minimum
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	Web Width Maximum

Index 75 (0x004B) – Web Width Maximum

Definition of the maximum web width / active length of the charging electrode in mm. If the selected web width is greater than the new maximum value, the web width and current setpoint are automatically corrected.

Slot	0
Subslot	1
Index	75
Datenlänge	2 Bytes
Name	Web Width Maximum
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	5000
Low Limit	Web Width Minimum
High Limit	5000

Index 76 (0x004C) – Strong Sparks Level

Level for the detection of strong sparks caused by sudden changes of the charging current strength. The value is defined in % of the maximum output current. The factor is calculated as follows:

$$f_{Strong} = \frac{Value_{Strong} * I_{\max Charging}}{8} \left[\frac{mA}{ms}\right]$$

The error/warning counter (index 28 and 29) starts counting up as soon as the system detects a change in current that exceeds the calculated level.
The level triggering a warning is set at 80 % of the level triggering an error. If the level for the counters (index 78) is exceeded, the appropriate error or warning message is output.
The problem may have a variety of causes (e.g., defective electrode, defective high-voltage cable, grounded materials in the vicinity of the electrode, etc.).

Slot	0
Subslot	1
Index	76
Datenlänge	2 Bytes
Name	Strong Sparks Level
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	40
Low Limit	25
High Limit	40

PROFINET Protocol Description POWER CHARGER

Index 77 (0x004D) – Weak Sparks Level

Level for the detection of weak sparks caused by sudden changes of the charging current strength. The value is defined in % of the maximum output current. The factor is calculated as follows:

$$f_{Weak} = \frac{Value_{Weak} * I_{\max Charging}}{8} \left[\frac{mA}{ms}\right]$$

The error/warning counter (index 30 and 31) starts counting up as soon as the system detects a change in current that exceeds the calculated level.
The level triggering a warning is set at 80 % of the level triggering an error. If the level for the counters (index 78) is exceeded, the appropriate error or warning message is output. The problem may have a variety of causes (e.g., defective electrode, defective high-voltage cable, grounded materials in the vicinity of the electrode, etc.).

Slot	0
Subslot	1
Index	77
Datenlänge	2 Bytes
Name	Weak Sparks Level
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	25
Low Limit	10
High Limit	25

Index 78 (0x004E) – Sparks Counter Limit

Threshold value for the individual sparks counters (indices 28–31) at which the corresponding error or warning message is output.
If the assigned value is 0, the system will not issue any error or warning messages.

Slot	0
Subslot	1
Index	78
Datenlänge	2 Bytes
Name	Sparks Counter Limit
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	10
Low Limit	0
High Limit	1000

Index 79 – Pollution Detection Charging

Parameters for configuring the pollution monitor for the charging process. Available options are:

- 0 – monitor deactivated
- 1 – monitoring of the charging process
- 2 – calibration of the pollution monitor

The pollution monitor must be calibrated to ensure that any pollution of the charging electrode during operation is reliably detected.
Monitoring begins automatically if the nominal charging resistance (index 80) includes the default value and the monitor is active. Eltex recommends cleaning the charging electrode before the calibration. We also recommend recalibrating the pollution monitor for each new application. The calibration is performed while the high voltage for charging is active; the calibration data is collected over a period of 20 minutes. If the high voltage has been deactivated, the monitor waits for charging to be enabled.

Slot	0
Subslot	1
Index	79
Datenlänge	2 Bytes
Name	Pollution Detection Charging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	2

Index 80 (0x0050) - Nominal Resistance Charging

Nominal charging resistance. This value is the reference for the pollution monitor. A decreasing load resistance of charging (index 32) is a sign of conductive pollution. Isolating pollution will increase the load resistance.
The nominal resistance must be determined in the course of the pollution monitor calibration. As the resistance can fluctuate strongly depending on the application and job of the generator, we recommend determining the resistance for each application/job and saving the values externally. When the job is subsequently changed, the parameter must be assigned the appropriate value to ensure optimum pollution detection.
The value is given in Ω.

Slot	0
Subslot	1
Index	80
Datenlänge	4 Bytes
Name	Nominal Resistor Charging Low Half Word
Data Type	UNSIGNED32
Access Type	Read/Write

Default Value	0x0000
Low Limit	0x00000000
High Limit	0xFFFFFFFF

Index 81 (0x0051) – Limitation Warning

Activation/deactivation of the warnings generated by the individual limitations.

The following settings are possible:

- 0 – limitation warnings inactive
- 1 – limitation warnings active

Slot	0
Subslot	1
Index	81
Datenlänge	2 Bytes
Name	Limiter Warning
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	1
Low Limit	0
High Limit	1

Index 82 (0x0052) – Keyboard Lock

Activation/deactivation of the membrane keyboard lock. If the keyboard lock is active, the integrated membrane keyboard at the generator is nonfunctional. Please note that this parameter is not saved: The keyboard lock is always inactive after a restart of the generator.

- 0 – keyboard lock inactive
- 1 – keyboard lock active

Slot	0
Subslot	1
Index	82
Datenlänge	2 Bytes
Name	Keyboard Lock
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	1

PROFINET Protocol Description POWER CHARGER

Index 83 (0x0053) – LED Bar Mode

Setting of the mode for displaying actual values using the integrated LED bar.

- 0 – display of the actual voltage value
- 1 – display of the actual current value

Slot	0
Subslot	1
Index	83
Datenlänge	2 Bytes
Name	LED Bar Mode
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	1

Index 128 (0x0080) – Discharging Capacity

Utilization of the discharging capacity in percent. The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	128
Datenlänge	2 Bytes
Name	Discharging Capacity
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 129 (0x0081) – Status Discharge 1

Display of the status of discharge connection 1. The actual value is only available for the PC__/A versions.
Pollution detection is only possible in conjunction with a series R60 or R60L electrode at this discharge connection. To enable pollution detection, the indices 170 and 171 must be configured accordingly.

- 0 – no load connected
- 1 – load connected
- 2 – conductive pollution detected
- 3 – isolating pollution detected

Slot	0
Subslot	1
Index	129
Datenlänge	2 Bytes
Name	Status Discharging Bar 1
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 130 (0x0081) – Status Discharge 2

Display of the status of discharge connection 2. The actual value is only available for the PC__/A versions.
Pollution detection is only possible in conjunction with a series R60 or R60L electrode at this discharge connection. To enable pollution detection, the indices 170 and 172 must be configured accordingly.

- 0 – no load connected
- 1 – load connected
- 2 – conductive pollution detected
- 3 – isolating pollution detected

Slot	0
Subslot	1
Index	130
Datenlänge	2 Bytes
Name	Status Discharging Bar 2
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 131 (0x0083) – Temperature Discharging

Discharging temperature in °C. The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	131
Datenlänge	2 Bytes
Name	Temperature Discharging
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 132 (0x0084) – Discharging Voltage

Effective discharging voltage in V. The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	132
Datenlänge	2 Byte
Name	Discharging Voltage
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 133 (0x0085) – AC Discharging Current

Effective AC discharging current in µA. The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	133
Datenlänge	2 Bytes
Name	AC Discharging Current
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	

High Limit	

PROFINET Protocol Description POWER CHARGER

Index 134 (0x0086) – DC Discharging Current

Signed DC discharging current in µA. The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	134
Datenlänge	2 Bytes
Name	DC Discharging Current
Data Type	SIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 135 (0x0087) – Discharging Power

Discharging power in W with one decimal place (the value 125 corresponds to 12.5W). The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	135
Datenlänge	2 Bytes
Name	Discharging Power
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 136 (0x0088) – Discharging Mode

Operating mode of the discharging process. The actual value is only available for the PC__/A versions.

The information regarding the operating mode is divided into two parts. The lower-value byte represents the currently active mode. The higher-value byte represents the discharging limitations.

- Discharging mode
  0 – passive discharging
  1 – active discharging
- Discharging limitations
  Bit 8 – voltage limitation
  0 – voltage limitation inactive
  1 – voltage limitation active

Slot	0
Subslot	1
Index	136
Datenlänge	2 Bytes
Name	Discharging Mode
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 137 (0x0089) – Power Discharge 1

Effective power of discharge connection 1 in mW. The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	137
Datenlänge	2 Bytes
Name	Power Discharge 1
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 138 (0x008A) – Power Discharge 2

Effective power of discharge connection 2 in mW. The actual value is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	138
Datenlänge	2 Bytes
Name	Power Discharge 2
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 141 (0x008D) – Years Discharging Hour

Years of the discharging hours counter. The hours counter is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	141
Datenlänge	2 Bytes
Name	Years Discharging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 142 (0x008E) – Days Discharging Hour

Days of the discharging hours counter. The hours counter is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	142
Datenlänge	2 Bytes
Name	Days Discharging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 143 (0x008F) – Hours Discharging Hour

Hours of the discharging hours counter. The hours counter is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	143
Datenlänge	2 Bytes
Name	Hours Discharging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 144 (0x0090) – Minutes Discharging Hour

Minutes of the discharging hours counter. The hours counter is only available for the PC__/A versions.

Slot	0
Subslot	1
Index	144
Datenlänge	2 Bytes
Name	Minutes Discharging Hour
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 160 (0x00A0) – Voltage Setpoint Discharging

Definition of the voltage setpoint for discharging in V.
The parameter is only available in the PC__/A versions.

Slot	0
Subslot	1
Index	160
Datenlänge	2 Bytes
Name	Voltage Setpoint Discharging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	100% Umax Discharging
Low Limit	Umin Discharging
High Limit	Umax Discharging

PROFINET Protocol Description POWER CHARGER

Index 161 (0x00A1) – Current Setpoint Discharging

Definition of the current setpoint for discharging in µA.
This is a read-only parameter. The parameter is only available in the PC__/A versions.

Slot	0
Subslot	1
Index	161
Datenlänge	2 Bytes
Name	Current Setpoint Discharging
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 162 (0x00A2) – Power Setpoint Discharging

Definition of the power setpoint for discharging in W.
The parameter is only available in the PC__/A versions.

The power value is shown with one decimal place (the value 125 corresponds to 12.5W).

Slot	0
Subslot	1
Index	162
Datenlänge	2 Bytes
Name	Power Setpoint Discharging
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 163 (0x00A3) – Setpoint Percent Discharging

Definition of the voltage setpoint for discharging in percent.

Slot	0
Subslot	1
Index	163
Datenlänge	2 Bytes
Name	Setpoint Percent Discharging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	100
Low Limit	0
High Limit	100

Index 164 (0x00A4) – Discharging Mode

Definition of the discharging mode. The parameter is only available in the PC__ C versions. The following options are available:

- 0 – passive discharging
- 1 – active discharging

Slot	0
Subslot	1
Index	164
Datenlänge	2 Bytes
Name	Discharging Mode
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	1

PROFINET Protocol Description POWER CHARGER

Index 167 (0x00A7) – Discharging Adjustment

Definition of the parameter adjustment for an optimum discharging result in percent. The parameter is only available in the PC__/A versions.

Slot	0
Subslot	1
Index	167
Datenlänge	2 Bytes
Name	Discharging Adjustment
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	100

Index 168 (0x00A8) – Discharging Frequency

Selection of the discharge voltage frequency. The frequency is determined by the selected frequency index. The following discharging frequencies can be selected:

The parameter is only available in the PC__/A versions.

- 0 – 50Hz
- 1 – 55.7Hz
- 2 – 62.5Hz
- 3 – 71.4Hz
- 4 – 83.3Hz
- 5 – 100Hz
- 6 – 125Hz
- 7 – 166.7Hz
- 8 – 250Hz

Slot	0
Subslot	1
Index	168
Datenlänge	2 Bytes
Name	Discharging Frequency
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	8

PROFINET Protocol Description POWER CHARGER

Index 169 (0x00A9) – Software Release Discharging

Parameter for activating/deactivating the software release for discharging. If the software release is deactivated, discharging is enabled exclusively via the hardware release.
The parameter is only available in the PC__/A versions.

- 0 – software release for discharging inactive
- 1 – software release for discharging active

Slot	0
Subslot	1
Index	169
Datenlänge	2 Bytes
Name	Software Release Discharging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	1
Low Limit	0
High Limit	1

Index 170 (0x00AA) – Pollution Detection Discharging

Parameter for the configuration of the pollution monitor. The pollution monitor only works in conjunction with series R60 and R60L electrodes. The parameter is only available in the PC__/A version.
When the pollution monitor is active, the actual power value for output 1/2 (index 137/138) is compared to the calculated nominal power for the output (index 171/172). The values are compared at a known reference point that is selected automatically and without regard to the defined parameters for the discharging voltage.

The nominal power can be determined using the pollution monitor calibration. The appropriate parameters for indices 171 and 172 can also be set manually.

- 0 – pollution monitor for discharging inactive
- 1 – pollution monitor for discharging active
- 2 – calibration of the pollution monitor for discharging

Slot	0
Subslot	1
Index	172
Datenlänge	2 Bytes
Name	Pollution Detection Discharging
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	2

Index 171 (0x00AB) – Nominal Power Discharge 1

Definition of the nominal discharging power at connection 1 in mW. This parameter is used in conjunction with the pollution monitor (index 170).
The parameter is only available in the PC__/A version.

Slot	0
Subslot	1
Index	171
Datenlänge	2 Bytes
Name	Nominal Power Discharge 1
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	1000

PROFINET Protocol Description POWER CHARGER

Index 172 – Nominal Power Discharge 2

Definition of the nominal discharging power at connection 2 in mW. This parameter is used in conjunction with the pollution monitor (index 170).

The parameter is only available in the PC__/A version.

Slot	0
Subslot	1
Index	172
Datenlänge	2 Bytes
Name	Nominal Power Discharge 2
Data Type	UNSIGNED16
Access Type	Read/Write
Default Value	0
Low Limit	0
High Limit	1000

Index 256 (0x0100) – Order Code

The complete part number of the generator in the form of an ASCII character string.

Slot	0
Subslot	1
Index	256
Datenlänge	32 Bytes
Name	Order Code
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 257 (0x0101) – Serial Number

The serial number of the generator in the form of an ASCII character string.

Slot	0
Subslot	1
Index	257
Datenlänge	14 Bytes
Name	Serial Number
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 258 (0x0102) – Revision Number Hardware

Version number of the hardware.

Slot	0
Subslot	1
Index	258
Datenlänge	2 Bytes
Name	Revision Number Hardware
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

Index 259 (0x0103) – Revision Number Software

The version number of the software in the form of ASCII character string

Slot	0
Subslot	1
Index	259
Datenlänge	8 Bytes
Name	Revision Number Software
Data Type	UNSIGNED16
Access Type	Read Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 260 (0x0104) – Software Reset

The generator software can be reset with a write access using the key 0x71A3.
Before the reset, the system will perform an internal check to determine if a reset is possible. In the event of a diagnostic error (error number larger than 80), a reset via the network is not possible.

Slot	0
Subslot	1
Index	260
Datenlänge	2 Bytes
Name	Software Reset
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	
Low Limit	
High Limit	

Index 261 (0x0105) – Error History

This index contains a list of recent error messages. The last error to be output is saved in index 11.

Slot	0
Subslot	1
Index	261
Datenlänge	32 Bytes
Name	Error History
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	
Low Limit	
High Limit	

PROFINET Protocol Description POWER CHARGER

Index 262 (0x0106) – Warning History

This index contains a list of recent warning messages. The last warning to be output is saved in index 12.

Slot	0
Subslot	1
Index	262
Datenlänge	2 Bytes
Name	Error History
Data Type	UNSIGNED16
Access Type	Write Only
Default Value	
Low Limit	
High Limit	