Product Portfolio
Electronic Components for UV Systems

for Treatment and Disinfection Systems
on Water, Air and Surfaces

ZED Ziegler Electronic Devices GmbH

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Made in Germany - High Reliability

Electronic Components for UV Systems

RS485

Electronic Ballasts
Low Pressure up to 180W

Made in Germany - High Reliability

Electronic Ballasts
Low Pressure up to 180W

- ⊘ multiple outputs – 4, 3, 2, 1 lamps per ballast
- ⊘ instant start (IS-, RS-types) or lamp filament preheating (PH-types) for optimal lamp life
- ⊘ CE approved

- ⊘ lamp dimming / digital control (PHplus types)
- ⊘ up to 30m cable length for PH-S/PHplus types
- ⊘ complete systems available (UV-Compact)

	no. of lamps	max. lamp power [W]	4pin lamps	2pin lamps	electrode preheating	status indicator LED/relay	dimming	control	dimensions	form type (examples)
E20RS	1	24	x	-	-	●●	-	-	150x40x36 mm (5.90x1.57x1.42 inch)	
E20IS	1	24	-	x	-	●●	-	-		
E20RS-24V DC	1	17	x	-	-	●●[1]	-	-		
E20IS-24V DC	1	17	-	x	-	●●[1]	-	-		

[1]photocoupler instead of relay

	no. of lamps	max. lamp power [W]	4pin lamps	2pin lamps	electrode preheating	status indicator LED/relay	dimming	control	dimensions	form type
E40PH-24V DC	1	50	x	-	x	●●	-	-	170x56x49 mm (6.69x2.20x1.92 inch)	
E80RS	1	90	x	-	-	●●	-	-		
E80IS	1	90	-	x	-	●●	-	-		
E80PH-24V DC	1	90	-	x	x	●●	-	-	248x66x53 mm (9.76x2.60x2.09 inch)	
E2x80RS	2	90	x	-	-	●●	-	-		
E2x80IS	2	90	-	x	-	●●	-	-		
E200RS	1	180	x	-	-	●●	-	-		
E200IS	1	180	-	x	-	●●	-	-		
E200PH	1	180	x	-	x	●●	-	-		
E3x80IS	3	90	-	x	-	●●	-	-	248x105x59 mm (9.76x4.13x2.32 inch)	
E4x80IS	4	90	-	x	-	●●	-	-		
E2x200RS	2	180	x	-	-	●●	-	-		
E2x200IS	2	180	-	x	-	●●	-	-		
E2x200PH	2	180	x	-	x	●●	-	-		
E2x200PH-S	2	160	x	-	x	●●●	-	-		
E2x200PHplus	2	160	x	-	x	●●●	x	x		
E400PH-S	1	400	x	-	x	●●●	-	-		
E400PHplus	1	400	x	-	x	●●●	x	x		
UV-Compact	1	200	x[2]	x[2]	x[2]	●●●[3]	-	x	204x190x72 mm (8.01x7.48x2.83 inch)	

[2]option, [3]LCD backlight

complete system with lamp/ballast control functions,
integrated ballast, hour counter; 3 color LCD backlight;
various configuration options:
UV/temperature monitor, alarm relays, electrode preheating,
internal fan depending on lamp power

	no. of lamps	max. lamp power [W]	4pin lamps	2pin lamps	electrode preheating	status indicator LED/relay	dimming	control	dimensions	form type
E4x150IS	4	150	-	x	-	●●	-	-	248x150x59 mm (9.76x5.89x2.32 inch)	

Installation data

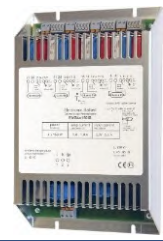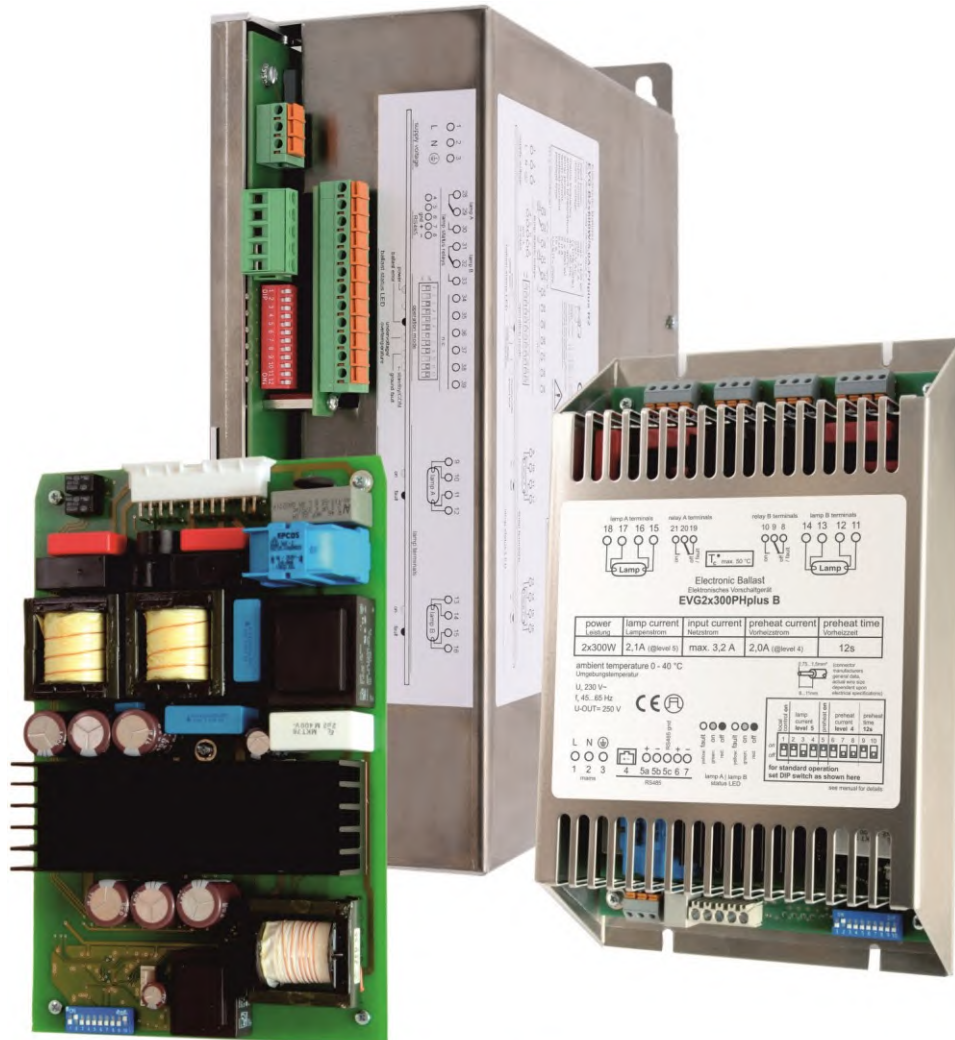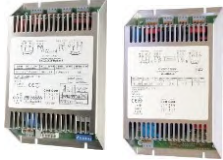|			
supply voltage (depending on type)	230V AC (196...249V / 45-65Hz) 24V DC ± 10% (other types on request)	operation temperature	max. 50°C (122°F) at T$_C$-point
IP Code	IP 20, UV-Compact: IP 54	ambient temperature	0 - 40°C (32 - 104°F)

Electronic Ballasts
Low Pressure up to 1200W

Made in Germany - High Reliability

Electronic Ballasts
Low Pressure up to 1200W

- ⊘ multiple outputs – 4, 3, 2, 1 lamps per ballast
- ⊘ lamp filament preheating (PH-types) for optimal lamp life
- ⊘ CE approved
- ⊘ lamp dimming / digital control (PHplus types)

- ⊘ up to 30m cable length for PH-S/PHplus types
- ⊘ R types for rack mounting
- ⊘ complete systems available (Modula)

	no. of lamps	max. lamp power [W]	4pin lamps	2pin lamps	electrode preheating	status indicator LED/relay	dimming	control	dimensions	form type (examples)
E400PH	1	400	x	-	x	●●	-	-	248x105x59 mm (9.76x4.13x2.32 inch)	
E400PH-S	1	400	x	-	x	●●●	-	-		
E400PHplus	1	400	x	-	x	●●●	x	x		
E2x300PH-S	2	350	x	-	x	●●●	-	-	248x150x59 mm (9.76x5.89x2.32 inch)	
E2x300PHplus	2	350	x	-	x	●●●	x	x		
E600PHplus	1	600	x	-	x	●●●	x	x		
R400PHplus	1	400	x	-	x	●●●	x	x	220x143,5x60 mm (8,66x5,65x2,36 inch)	
R2x300PHplus	2	350	x	-	x	●●●	x	x		
R600PHplus	1	600	x	-	x	●●●	x	x		
E3x300PHplus	3	400	x	-	x	●●●●[1]	x	x	269x317x83 mm (10.57x12.46x3.27 inch)	
E4x300PHplus	4	325	x	-	x	●●●●[1]	x	x		
E2x600PHplus	2	600	x	-	x	●●●●[1]	x	x		
E1200PHplus	1	1200	x	-	x	●●●	x	x		
						[1]relay optional				
R3x300PHplus	3	400	x	-	x	●●●●[1]	x	x	270x250x70 mm (10.61x9.82x2.75 inch)	
R4x300PHplus	4	325	x	-	x	●●●●[1]	x	x		
R2x600PHplus	2	600	x	-	x	●●●●[1]	x	x		
R1200PHplus	1	1200	x	-	x	●●●	x	x		
						[1]relay optional				
Modula 3x200W	3	200	x	-	x	●●●	x	x	300x250x84 mm (11.81x9.84x3.31 inch)	
Modula 2x300W	2	300	x	-	x	●●●	x	x		
Modula 1x600W	1	600	x	-	x	●●●	x	x		

ballast(s) combined with control- and monitoring features
plus various interfaces
UV/temperature monitor, control/monitoring via RS485/ModBus RTU,
remote switch, interlock, mains switch,
4 relay contacts, 4-20mA signal input/output

Installation data

supply voltage	230V AC (196...249V / 45-65Hz) (other types on request)	operation temperature	max. 50°C (122°F) at T_c-point
IP Code	IP 20, rack types: IP 00	ambient temperature	0 - 40°C (32 - 104°F)

Electronic Ballasts
Medium Pressure up to 2500W

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Electronic Ballasts
Medium Pressure up to 2500W

- ⊘ compact design with internal ignitor (IG-types)
- ⊘ extended cable length with external ignitor
- ⊘ CE approved
- ⊘ lamp dimming / digital and analog control interface

- ⊘ lamp operation parameter sets can be set and modified by customer
- ⊘ active fan for optimal thermal management

	no. of lamps	max. lamp power [W]	internal ignitor	external ignitor	status indicator LED/relay	dimming	digital control	analog control	dimensions	form type (examples)
EVG-M650-IG	1	650	x	-	●●●	x	x	x[1]	248x150x59 mm (9.76x5.89x 2.32 inch)	
EVG-M650	1	650	-	x	●●●	x	x	x[1]		

[1] default: 0...10V; optional 4...20mA

	no. of lamps	max. lamp power [W]	internal ignitor	external ignitor	status indicator LED/relay	dimming	digital control	analog control	dimensions	form type (examples)
EVG-M2500-IG	1	2500	x	-	●●●	x	x	x[1]	279x317x81 mm (10.98x12.48x 3.19 inch)	
EVG-M2500	1	2500	-	x	●●●	x	x	x[1]		

[1] default: 0...10V; optional 4...20mA

Installation data

supply voltage	230V AC (196...249V / 45-65Hz) (other types on request)	operation temperature	max. 50°C (122°F) at T_C-point
IP Code	IP 20	ambient temperature	0 - 40°C (32 - 104°F)

Software
for Ballast Control
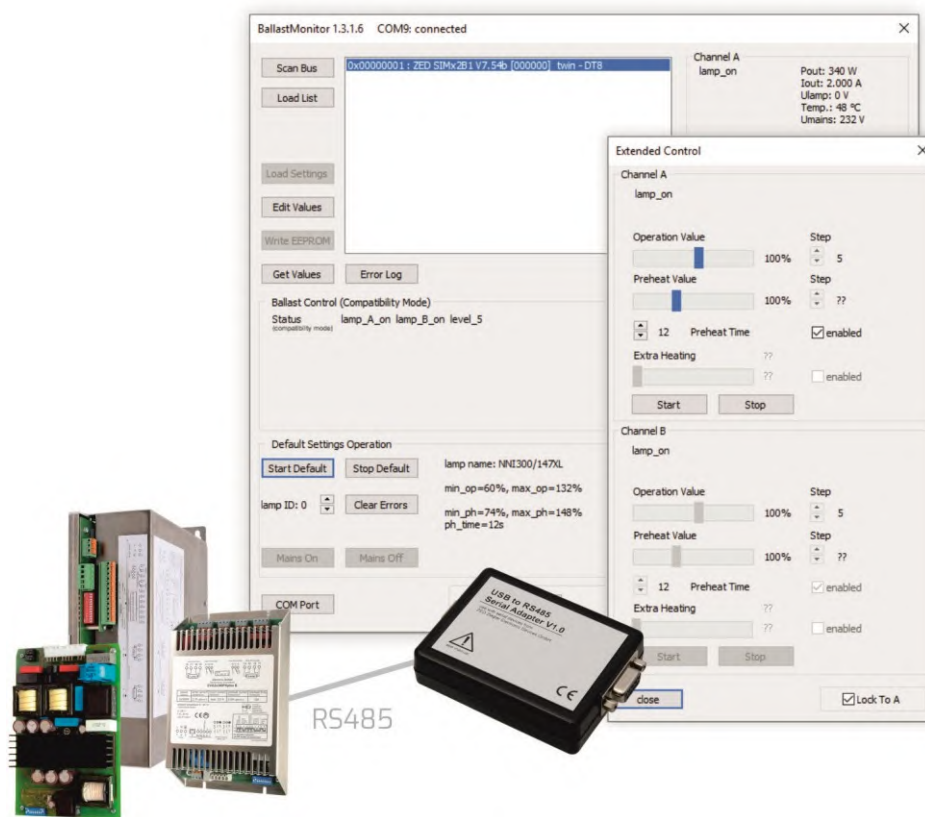
ZED Ballast Monitor

PC application bundled with a special ZED USB-to-RS485 adapter for operation control of ZED ballasts with digital interface

- ⊘ check ballast settings and operation values
- ⊘ set/change lamp parameter sets
- ⊘ Data Logger
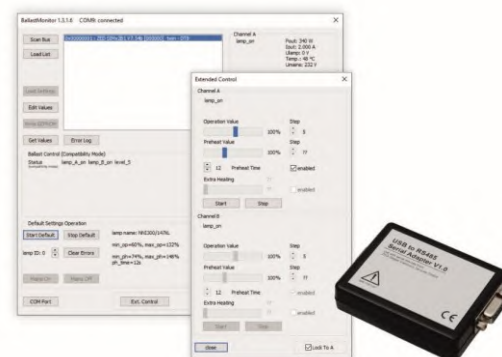
Accessories
for Electronic Ballasts

R600 Rack Mount Frame

- ⊘ for ZED R-EVG (R2x300PHplus, R400PHplus, R600PHplus)
- ⊘ 6-slots for up to 6 single or dual lamp ballasts
- ⊘ push-in card system using MOLEX JUNIOR FIT connectors
  (MK-type plugs, contacts and tools see below)
- ⊘ open frame design for easy mounting and cooling,
  prepared for direct fan mounting (fans on request)

407x236x267 mm
(16.02x9.29x10.53 inch)

application example

Rack assembly accessories

- o MK-R - plugs for ZED racks
- o MK-S - snap-in plugs for non-rack installations
- o C-MK crimp contacts
- o crimp tool MK
- o extraction tool MK

Ballast Simulator SIMPHplus/SIM2xPHplus

- ⊘ programming support tool for integrating
  ZED PHplus ballasts in PLC controlled UV applications
- ⊘ operation simulation of UV systems
  without ballasts or lamps installed
- ⊘ simulation of
  - o single/ dual lamp ZED PHplus ballasts
  - o lamp and ballast operation
  - o lamp and ballast faults
  - o RS485 communication

483x45x35 mm
(19x1.77x1.38 inch)

Control Units
for Electronic Ballasts

RS485
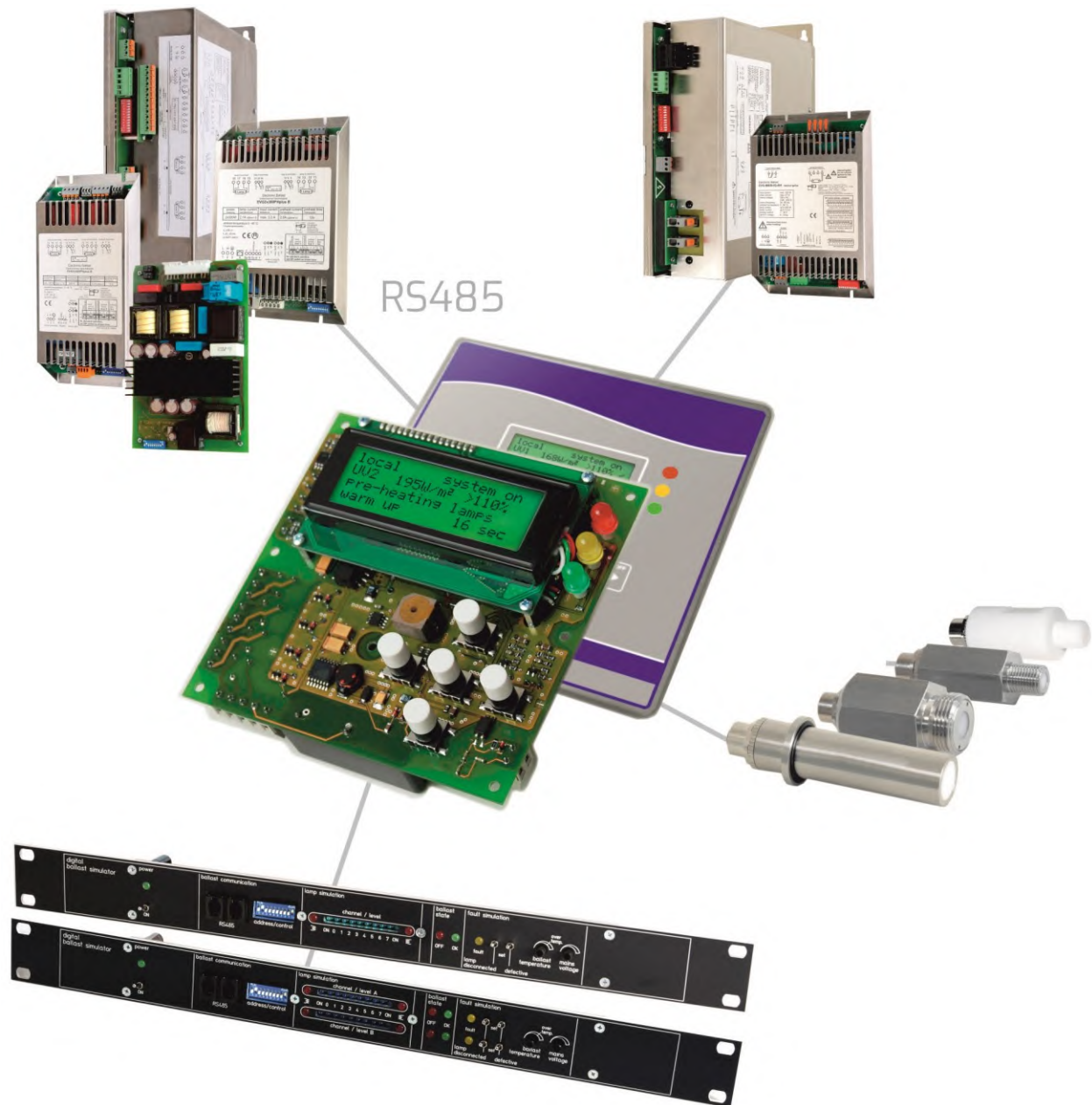
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Control Units
for Electronic Ballasts

	no. of ballasts	no. of lamps	dimming	analog IN	switching IN	digital control	UV monitoring	temperature monitoring	analog OUT	status relay	status LED/LCD	dimensions	form type (examples)
ZCON mini	32	128	x	1	1	x	x	x	1	3	●●●	130x130x50 mm (5.12x5.12x1.96 inch)	

- ⊘ out-of-the-box UVC ballast control unit for up to 32 ZED PHplus ballasts / 128 lamps
- ⊘ connects to higher order systems via Modbus RTU
- ⊘ 4...20mA remote operation control (e.g. dimming by flow...)
- ⊘ switching input for remote start
- ⊘ operation hour counter, switch cycle counter
- ⊘ UV-C monitoring with up to 4 digital ZED UVC sensors
- ⊘ temperature monitoring
- ⊘ 4...20mA out for status forwarding (UV value, dimm state)
- ⊘ data logging and settings import/export via SD-Card
- ⊘ several add-ons available allowing flow monitoring, dynamic lamp dimming, reactor flushing...

	no. of ballasts	no. of lamps	dimming	analog IN	switching IN	digital control	UV monitoring	temperature monitoring	analog OUT	status relay	status LED/LCD	dimensions	form type (examples)
ZCON nano	12	48	x	1[1]	-	-	-	-	-	2	●●●[2]	70x95x55 mm (2.75x3.73x2.16 inch)	

[2] LCD backlight only

- ⊘ out-of-the-box dimming interface for up to 12 ZED PHplus ballasts / 48 lamps
- ⊘ 4-20mA ([1] optional 0-10V) dimming signal input
- ⊘ operation hour counter, switch cycle counter

ZED LogDataViewer

Windows-PC application for import, visualization and evaluation of log data from ZCONmini II

- ⊘ integrated data base for multiple reading points
- ⊘ flexible configurable display options
- ⊘ data export into CSV file
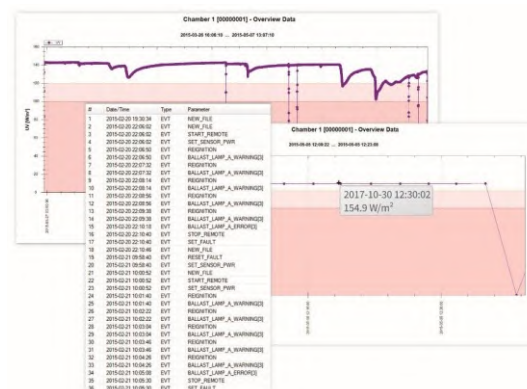
Installation data

supply voltage	ZCON mini: 100...240V AC (other types on request) ZCON nano: 230V AC (other types on request)	mounting	to be installed in a closed cabinet ZCON nano: DIN rail mounting
IP Code	IP 00, (ZCON mini: IP20 at front with optional front panel)	operation temperature	max. 45°C (113°F)
		ambient temperature	0 - 40°C (32 - 104°F)

UV-C Monitor PRO11DPI-I
Application Example

relay contacts
for external status
monitoring

system OK

aux power

UV pre-alarm /
lamp fault

system OK

aux power

UV alarm /
lamp fault

4...20mA output
for UV value forwarding

mA

sensor cable length
max. 30m

monitoring of up to
2 digital UV sensors

L

N

remote inputs
for switching signals

lamp fault
(used with ballast error relays)

UV off
(stop UV monitoring while ballasts
are switched off)

UV - MONITOR

v1:   96.4W/m²
hour:

PRO 11

UV display unit selectable
depending on sensor type:
D-SIC/D-SiC-I: W/m² | mW/cm² | %
D-SLS/SiC: %

UV-C Monitors

- ⊘ UV-C monitoring in "W/m²", "mW/cm²" or "%" or simple "traffic light"-system
- ⊘ connect to all digital ZED UV sensors*
- ⊘ convert digital sensor signals into analog output values*

- ⊘ switch cycle counter / operation hour counter with lamp replacement indication*
- ⊘ system status forwarding using potential free relay contacts

except for PRO3

	digital UV sensor IN	digital temperature sensor IN	4...20mA IN	photodiode signal IN	4...20mA OUT	0...10V OUT	status relay	status LCD	status LED	operation hour / switch cycle counter	ÖNORM M5873-1 compliant	DIN 19294-1 compliant	remarks
PRO11DPI-I	2	-	1	1	1	-	2[1]	●●●	-	x	x	x	[1]UV pre alarm + alarm
PRO16DPI-I	2	-	1	1	1	-	1	●●●	-	x	x	x	
PRO30D-I	2[1]	2[1]	-	-	2	-	1	●●●	-	x	x	x	[1]combinations of max. two digital sensors
PRO30D-U	2[1]	2[1]	-	-	-	2	1	●●●	-	x	x	x	
PRO3	-	-	-	1	-	-	1		●●●[1]	-	-	-	[1] red <50%, yellow 50...75%, green >75%

Installation data

	PRO11DPI-I	PRO16DPI-I	PRO30D-I/U	PRO3

	PRO11DPI-I	PRO16DPI-I	PRO30D-I/U	PRO3
supply voltage	230V AC (other types on request)			
IP Code	IP20; (IP65 at front with optional front cover)	IP 00	IP 00	IP 00
dimensions	96x48x114 mm (3,77x1,89x4,48 inch)	72,5x72,5x53 mm (2,85x2,85x2,08 inch)	70x95x50 mm (2,75x3,73x1,96 inch)	75x49x41 mm (2,94x1,92x1,61 inch)
mounting	DIN43700 cut-out	to be installed in a closed cabinet DIN rail mounting		
operation temperature	max. 45°C (113°F)			
ambient temperature	0 - 40°C (32 - 104°F)			

Digital Sensors for UV-C Systems

D-SIC Sensors

- ⊘ different sensor body design – same features
- ⊘ optimal optical characteristics
- ⊘ absolute irradiance values in W/m²
- ⊘ digital processing/digital communication
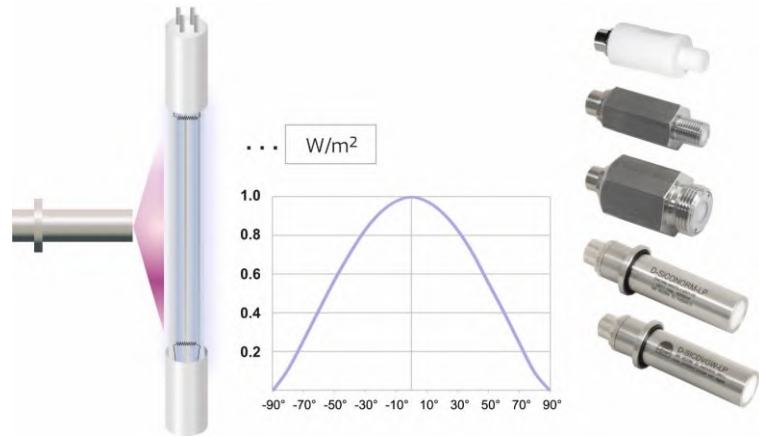
D-SLS Sensors

- ⊘ side-looking sensor for 360° view
- ⊘ special optical characteristics
- ⊘ relative irradiance values in "digits" or "%"
- ⊘ digital processing/digital communication
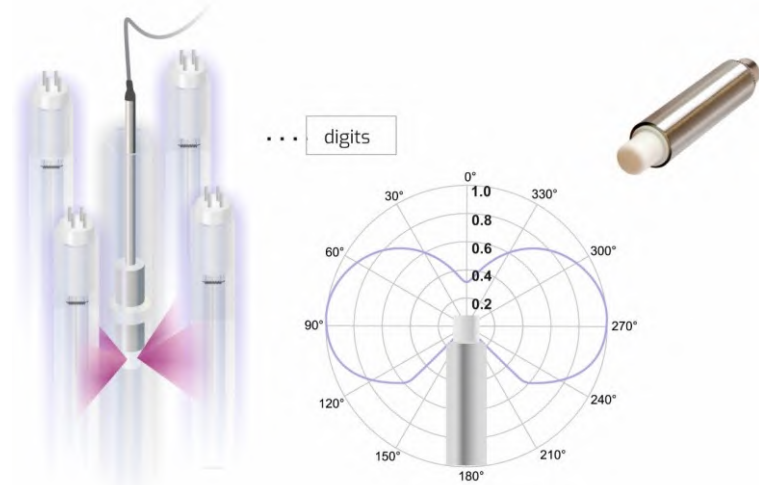
Sensor Accessories

Measurement Window MF001

- ⊘ for mounting of ÖNORM M5873 / DIN 19294 (DVGW) compliant UV-Sensors in certified UV systems
- ⊘ according to ÖNORM M5873 / DIN 19294 (DVGW) the sensor calibration must be checked regularly using a standardized reference meter; for that means the plant sensor must be capable of being pulled out and replaced by the reference sensor

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UV-C & Temperature Sensors

- ⊘ UV-C monitoring in "W/m²", "mW/cm²" or "%"
- ⊘ temperature measurement in °C
- ⊘ digital types with RS485/ZCON/ModBus RTU
- ⊘ low pressure (-LP) and medium pressure (-MP) types available
- ⊘ D-SiC-types = optimum signal resolution covering the entire measurement range

- ⊘ up to 30m cable length for digital signal transmission
- ⊘ low pressure plant sensors according to OENORM M5873 and DIN 19294
- ⊘ medium pressure plant sensors according to OENORM M5873
- ⊘ reference sensors according to OENORM M5873 and DIN 19294

|	digital interface	in-field recalibration[1]	4...20mA	0...2/5/10V	adjustable by customer[1]	ÖNORM M5873	DIN 19294	reference sensor	photodiode signal[2]	temperature in °C	mounting	form type (examples)
D-SiC131	x	x	-	-	-	-	-	-	-	-	pipe thread ISO228 G¼ front: 10bar, 1.4404, AF22x70mm	
D-SiC131-I	-	x	x	-	x	-	-	-	-	-		
D-SiC131-U2/U5/U10	-	x	-	x	x	-	-	-	-	-		
D-SiC133	x	x	-	-	-	-	-	-	-	-	pipe thread ISO228 G¾ front: 10bar, 1.4404, AF32x70mm	
D-SiC133-I	-	x	x	-	x	-	-	-	-	-		
D-SiC133-U2/U5/U10	-	x	-	x	x	-	-	-	-	-		
D-SiCT141	x	x	-	-	-	-	-	-	-	-	pipe thread ISO228 G¼, front: 10bar, Teflon, AF22 Ø25x71mm	
D- SiCT141-I	-	x	x	-	x	-	-	-	-	-		
D- SiCT141-U2/U5/U10	-	x	-	x	x	-	-	-	-			
D-SiCONORM	x	x	-	-	-	x	x	-	-	-	ÖNORM/DIN measurement window required, 1.4305, length 93mm	
D-SiCONORM-I	-	x	x	-	x	x	x	-	-	-		
D-SiCONORM-U2/U5/U10	-	x	-	x	x	x	x	-	-	-		
D-SiCDVGW	x	x	-	-	-	x	x	-	-	-	ÖNORM/DIN measurement window required, 1.4305, length 93mm	
D-SiCDVGW-I	-	x	x	-	x	x	x	-	-	-		
D-SiCDVGW-U2/U5/U10	-	x	-	x	x	x	x	-	-	-		
D-SiCONORM-LP-REF 500 W/m²	x	-	-	-	-	-	-	x	-	-	ÖNORM/DIN measurement window required, 1.4305, length 93mm	
D-SiCONORM-LP-REF 250 W/m²	x	-	-	-	-	-	-	x	-	-		
D-SiC-SLS006 UV-C sensor with lateral UV detection; relative UV values in "digits" or "%"	x	-	-	-	-	-	-	-	-	-	not watertight to be mounted in a quartz tube 1.4404, Ø20x85mm	
SiC001	-	-	-	-	-	-	-	-	x	-	pipe thread ISO228 G¼, front: 10bar, 1.4404, AF19x49mm	
SiCT001	-	-	-	-	-	-	-	-	x	-	pipe thread ISO228 G¼, front: 10bar, Teflon, AF17 Ø20x57mm	
SiC-SV01	-	-	-	-	-	-	-	-	x	-	not watertight, 1.4305, Ø17,5x38,5mm	
D-ST001 temperature sensor for measurement in liquids or gases	x	-	-	-	-	-	-	-	-	x	pipe thread ISO228 G¼, 1.4404, AF19x64mm	
D-ST002 temperature sensor for measurement on surfaces	x	-	-	-	-	-	-	-	-	x	mounting hole, diameter: 6mm 1.4404, AF19x61mm	

[1]on request [2]external signal amplification or ZED UV monitor required

Sensor in-field Recalibration

optional customer-specific feature
for D-SiC-Sensors and ZED Smartmeter,
allows

- ✓ recalibration by plant manufacturer
  in his own test bench
- ✓ recalibration on location
  by customer or customer service

- ✓ the access to sensor calibration data
  is protected with a customer specific key
  to be entered on ZED SmartMeter
- ✓ the connection of a valid reference type sensor
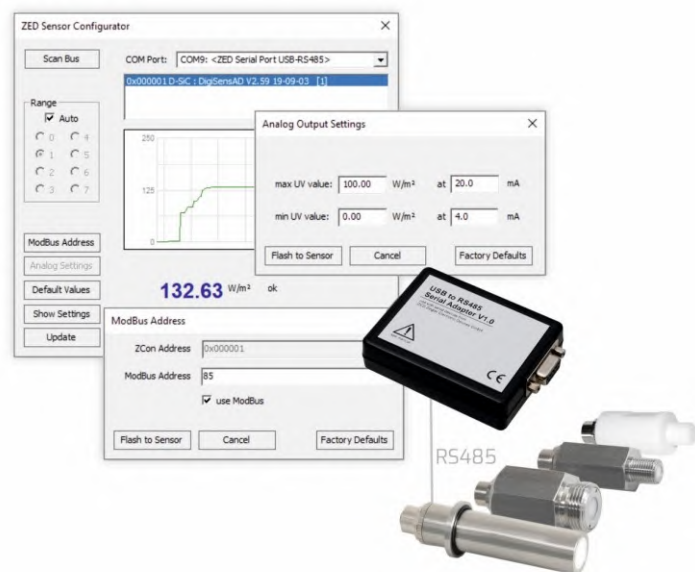 is checked by ZED SmartMeter
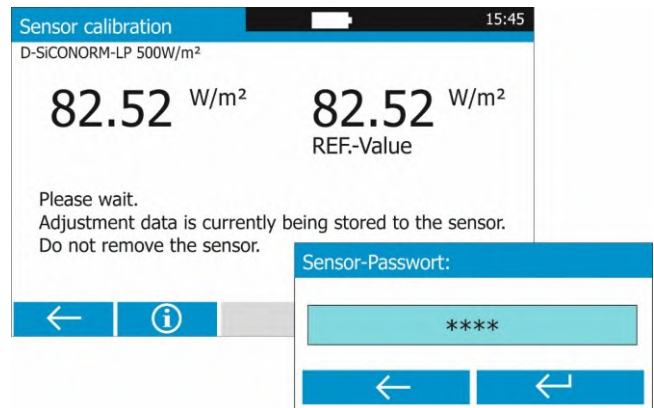
Software
for Sensor Control and Setup

ZED Sensor Configurator

PC application bundled with a special ZED
USB-to-RS485 adapter to connect digital
ZED sensors to a Windows-PC

- ✓ set/change ModBus address
  of D-SiC UV sensors
- ✓ setting up digital ZED sensors with
  analog signal output (D-SiC-I/U)
- ✓ UV-C meter
- ✓ Data Logger

Radiometer & Display Devices

ZED SmartMeter

operating and display device for digital ZED sensors
with graphical display

- ⊘ UV-C Reference Radiometer
  if used with ZED Reference Sensor
  D-SiCONORM-LP-REF
  (exceeding the specified operating hours
  of a connected reference sensor is indicated)
- ⊘ UV-C meter
- ⊘ Data Logger
- ⊘ set/change ModBus address of D-SiC UV sensors
  setting up digital ZED sensors with analog signal
  output (D-SiC-I/U)
- ⊘ graphical measurement-progress indication
- ⊘ sensor information: sensor-ID,
  operating hours, date of last
  adjustment/calibration
- ⊘ the SmartMeter does not have
  to be recalibrated

ZED TinyMeter

operating and display device for digital ZED sensors
with alphanumeric display, optimized for cost sensitive
applications

- ⊘ UV-C Reference Radiometer
  if used with ZED Reference Sensor D-SiCONORM-LP-REF,
  exceeding the specified operating hours of a connected
  reference sensor is indicated
- ⊘ UV-C meter
- ⊘ sensor information: sensor-ID, operating hours,
  date of last adjustment/calibration
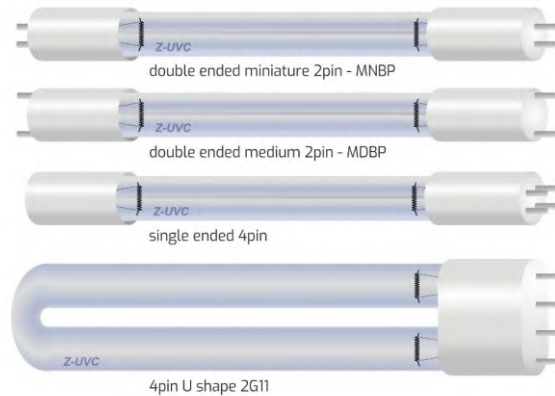- ⊘ the TinyMeter does not have to be recalibrated

Lamps, Sleeves & Sockets

⊘ for use in water disinfection, air treatment
   and special applications

UVC Low Pressure Lamps

lamp power range:	4...155W
available outer diameter:	15mm, 19mm
rated lamp life hours:	12000...16000h
quartz types:	ozone free / ozone generating

double ended miniature 2pin - MNBP

double ended medium 2pin - MDBP

single ended 4pin

4pin U shape 2G11

## Low Pressure Amalgam Lamps

lamp power range:	40...1000W
available outer diameter:	15...38mm
rated lamp life hours:	12000...16000h
quartz types:	ozone free / ozone generating

Spot Amalgam

Out-of-Arc Amalgam

⊘ Low Pressure Amalgam Lamps decrease the
   number of lamps in the treatment systems

⊘ yield up to more than three times the UVC output
   compared to standard UVC lamps of the same dimension

PPT Lamps

lamp power range:	250...1000W
lamp diameter:	T9, T10, T12
rated lamp life hours:	12000...16000h
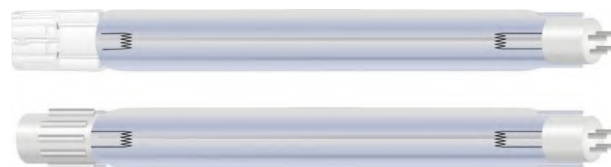
⊘ Optimized amalgam lamps for water treatment
   applications

⊘ Constant UV output in a wide range of water temperatures at full power

⊘ Predictable UV output at all dimming levels even on very low and very high water temperatures

...by leading lamp manufacturers

Lamps, Sleeves & Sockets

⊘ for use in water disinfection, air treatment
and special applications

Quartz Sleeves	

outer diameter: 15...100mm
length: up to 2200mm
wall thickness: 1...3mm
quartz types: standard (use in water/air disinfection)
                 special (transmission below 200nm)

both ends open

one end open (domed)

⊘ use for protecting Low Pressure UV-C Lamps, Amalgam Lamps, Medium Pressure Lamps

Sockets & Contacts	

ceramic socket KF4P
for 4pin lamps up to 10A

ceramic socket KF2P
for 2pin lamps up to 6A

ceramic socket KF2P MDK
for 2pin G13 lamps

ceramic socket KF2G11
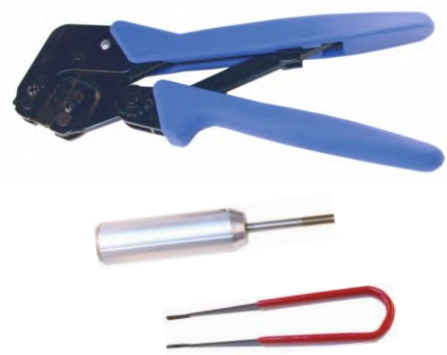for 4pin 2G11 lamps

crimp contacts C-KF

Tools	

crimp tool KF

extraction tool KF

insertion tool KF

PPT Optimized Amalgam Lamps up to 1000W

The UV-output of low-pressure amalgam UV-lamps is strongly dependent on temperature conditions. Small changes of ambient temperature could result in a significant drop of UV-output. The same effect can be noted when a lamp is operated in dimmed mode. Since the lamp dissipates less heat if operated with less power, dimming the lamp is changing its temperature – thus significant variations in UV-output might occur. These variations may be even greater the more the ambient temperature is changing.

PPT Lamps generate very predictable and stable UV-output values for all dimming levels in a wide range of environmental temperature. Due to the high stability, higher peak design power can be achieved – resulting in a higher UV-output. Besides stable and predictable UV-output, using PPT lamps may save energy and hardware equipment
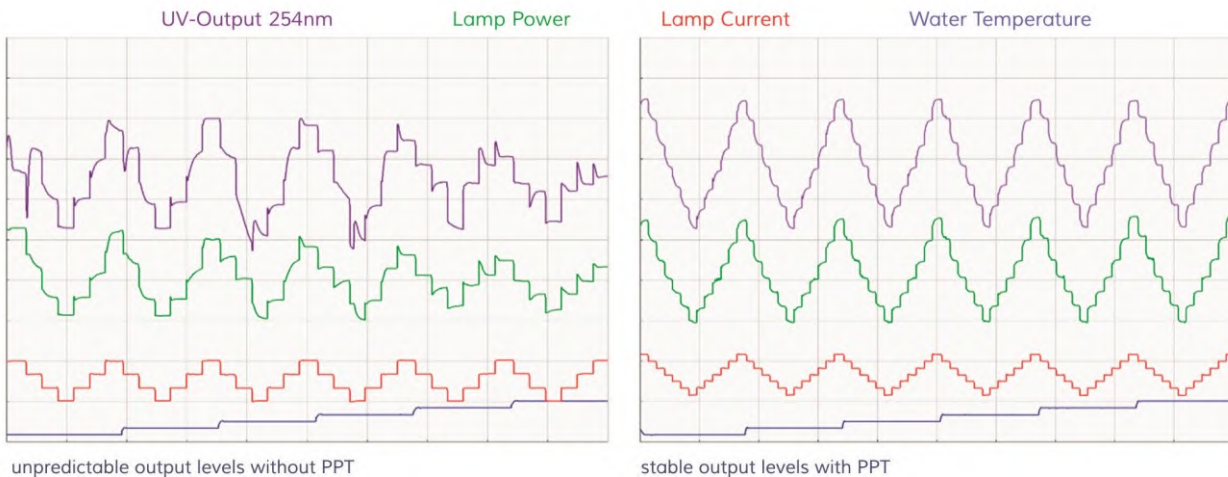
PPT-Set

= Amalgam Lamp + ZED electronic Ballast + Quartz Sleeve

⊘ Optimized amalgam lamps for water treatment applications

⊘ Constant UV output in a wide range of water temperatures at full power

⊘ Predictable UV output at all dimming levels even on very low and very high water temperatures

⊘ Standard lamp dimensions
 - existing UV system designs can be upgraded for better performance

⊘ 'Out of arc' amalgam lamps 250 – 1000W
(= T9, T10 or T12)
can be used as basis for PPT lamp designs

⊘ Ready to use
- T10 and T12 'out of the box' PPT lamp-ballast sets are available containing PPT lamp, suitable quartz sleeve and specific electronic ballast

⊘ Reduction of power headroom of the UV system
due to predictable UV output for normal flow and peak flow on different water temperatures

⊘ Best energy efficiency = best cost efficiency = best carbon footprint

Predictable UV output at all dimming levels

UV-Output 254nm   Lamp Power

unpredictable output levels without PPT

Lamp Current   Water Temperature

stable output levels with PPT

Excimer Lamp Systems
for 172nm & 222nm

Mercury-free excimer lamp technology for fast and efficient ozone generation using 172nm radiation, producing a power more ozone while at the same time retaining a much higher production efficiency compared to mercury low-pressure systems.

Excimer Lamp Systems for 172nm

= Excimer lamp + ZED Electronic Ballast + High Voltage Transformer

- ⊘ cost-efficient ozone generation
- ⊘ 172nm excimer technology
- ⊘ mercury free
- ⊘ long-life surface electrodes
- ⊘ no infrared generation

- ⊘ three lamp sizes available currently:
    - o lamp power: 40W, 50W, 60W
    - o ozone output: 2...6g/h
    - o lamp lifetimes: ~5000h

- ⊘ ready to be integrated into customers applications
- ⊘ testing kit including reactor available for evaluation

S-EVG-24-EXC - Excimer Lamp Driver for 222nm

- ⊘ 24V DC supply voltage
- ⊘ 20W single lamp operation
- ⊘ 1x20W or 2x20W twin lamp operation
  (depending on configuration)

(example: 20W excimer lamp)

ZED Ziegler Electronic Devices GmbH
...more than 25 years of experience

ZED Ziegler Electronic Devices GmbH is a Thuringian company in the center of Germany. ZED was founded in August 2001 using experience gathered since 1996. As a result of increasing activities, the once small firm has been expanded into a larger company. The first office building in Oehrenstock became too small and ZED moved to their new facility in Langewiesen/Ilmenau in 2007.

ZED Ziegler Electronic Devices GmbH:
- ⊘ electronic company
- ⊘ technology driven
- ⊘ quality minded
- ⊘ customer focussed
- ⊘ fast and flexible
- ⊘ highly qualified team

ZED business activities include the development, production and sales of reliable and efficient electronic driver systems designed to meet the special requirements within the purification and disinfection industry.

Standard accessories, classical and highly innovative solutions complement each other. A thorough understanding of the purification business requirements enables ZED to create the next generation accessories for UV systems, e.g., digital sensors, digital controlled electronic ballasts and several control units for sensors and ballasts.

The PCB assembly process gets done on a modern SMT line accomplished by several pick and place machines. ZED has just upgraded its production capability with brand-new state-of-the-art production equipment, like our selective soldering systems.

Our increased throughput now allows for higher volumes and updated pricing options.

- ⊘ best quality products
- ⊘ co-operative customer relations
- ⊘ realization of individual solutions
- ⊘ development and improvement of innovative technologies

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