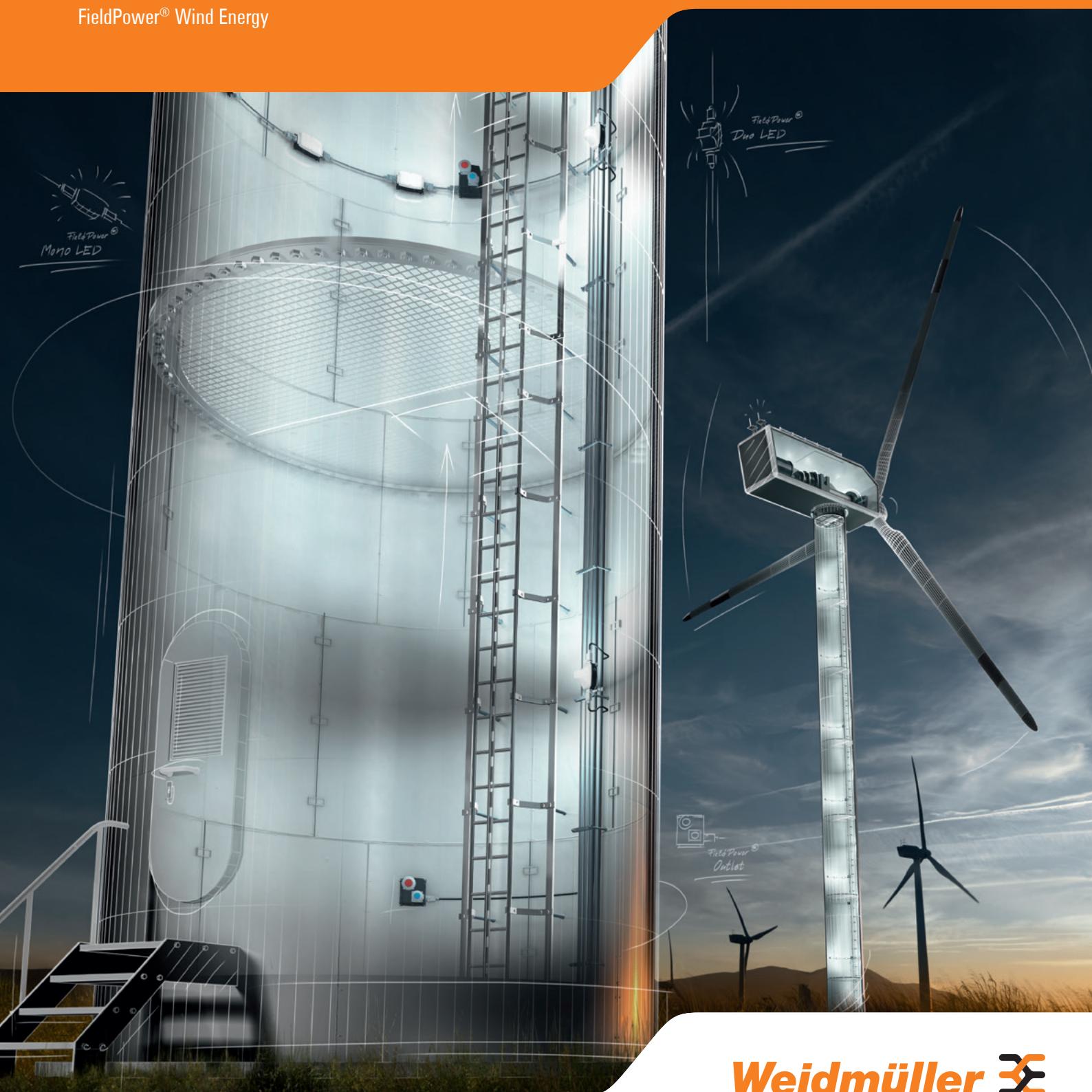


**A bright future for the efficiency of your systems
Our intelligent combination of lighting and power
Let's connect.**

FieldPower® Wind Energy



Weidmüller 

Our system solution

Benefit from the advantages of a system solution from a single source

Let's connect.



Dear readers,

Your aspiration is to achieve maximum system efficiency for minimum acquisition and overall operating costs. At the same time, your customers demand reliable and sustainable cost-effective solutions. At Weidmüller, we have been involved in the wind power sector right from the start and know your requirements inside out.

Based on our proven FieldPower® series we have developed a complete lighting and power system specifically for wind power installations, which you can integrate into any application-specific system: FieldPower® Wind Energy.

FieldPower® Wind Energy will allow you to unlock new potential for achieving increased efficiency, overall cost reductions and quality assurance. And the best part: you get all the components from a single source. This does away with time-consuming arrangements with different component suppliers – and saves a lot of hassle.

Let's connect.

- 4** **You want to be successful in the wind energy sector**
You can count on our experience
- 6** **Take advantage of an up to 100% customised system design**
Thanks to our proven FieldPower® concept
- 8** **The future of your lighting systems is in LED technology**
We have enlightening arguments to back up our claim
- 10** **Your systems require a reliable power supply**
With our connectivity solutions you are permanently supplied
- 12** **You want to know if the investment is worth your while**
We will show you – by way of direct comparison
- 14** **You benefit from the advantages of a system solution**
We supply you with everything from a single source
- 16** **LED customized solution**
That's how your tower solution could look like
- 18** **Technical data**
LEDs, Control Unit, Power supplies, UPS modules
- 28** **Your expectations of system engineering continue to grow**
Just like the performance of our product range
- 30** **Our expertise for your requirements**
Service connects – worldwide
- 32** **Online support and downloads**
Exactly the right help and information on our solutions and products



You increase the market success of your systems
We support you with an integrated design

As a supplier of wind power systems you are under ever-increasing pressure from your competitors. This is why you need to design your latest wind turbines to deliver as much success as possible. The aim is to achieve maximum system efficiency for minimum acquisition and overall operating costs. At the same time, your customers demand reliable and sustainable cost-effective solutions.

At Weidmüller we have been involved in the wind power sector right from the start and know your requirements inside out. Based on our proven FieldPower® series we have developed a complete lighting and power system specifically for wind power installations, which you can integrate into any application-specific system: FieldPower® Wind Energy.

FieldPower® Wind Energy will allow you to unlock new potential for achieving increased efficiency, overall cost reductions and quality assurance. And the best part: you get all the components from a single source. This does away with time-consuming arrangements with different component suppliers – and saves a lot of hassle.

Let's connect.

High system efficiency – low operating costs
Our unique system for lighting and power

FieldPower® Wind Energy – all the benefits of a system solution

Advanced LED lighting

- High energy efficiency
- Long service life
- Easy handling
- Reliable even at low temperatures

Pre-installable components

- Shorter installation times
- Savings in materials and costs through smaller cable cross-sections

Practical remote monitoring

- Detailed system status messages
- Reduced maintenance costs
- Integrates into existing system

Complete power supply system

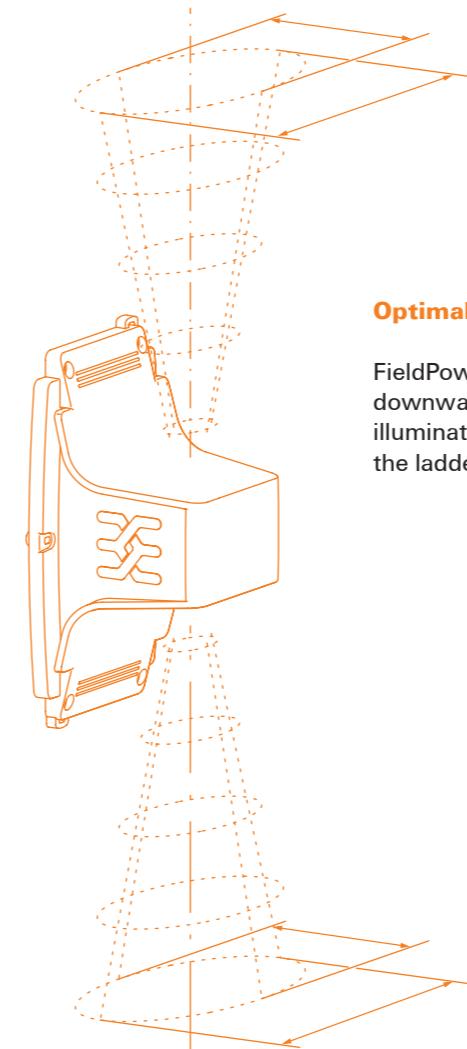
- Industry-standard switched-mode power supplies
- Cost-effective UPS integration
- Precisely tailored components

With FieldPower® Wind Energy we have harnessed all the benefits of our proven FieldPower® power bus systems especially for wind turbines. For you, this means high economic efficiency and practical usage – with a complete system that can be tailored to your exact needs.



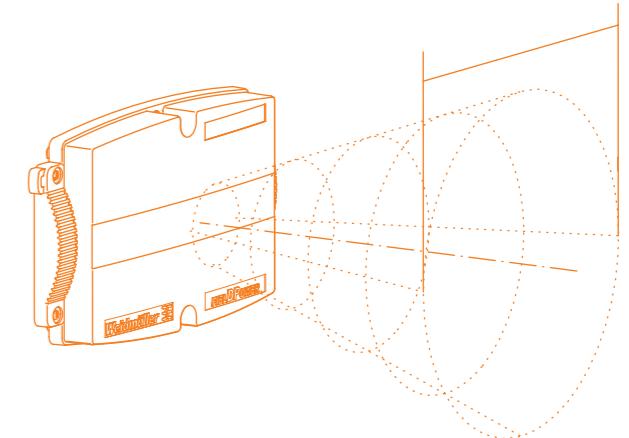
Take advantage of an up to 100% customised system design

Thanks to our proven FieldPower® concept



Optimal lighting in the tower

FieldPower® Duo LED with upwards and downwards facing directional light. Ideal for illuminating wall sections, such as in and around the ladders in the tower.

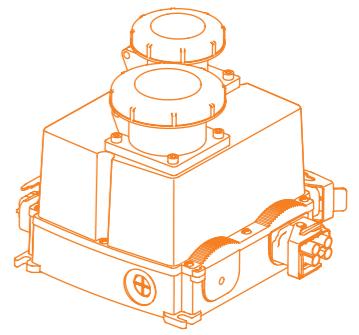


Optimal lighting in the hub and nacelle

FieldPower® Mono LED K with collimators for directional lighting. Ideal for illuminating work areas requiring high levels of lighting in a small space.

Optimum power supply

Individual positioning of compact power outlets. For quick access to power in all sections and levels of the turbine.



The future of your lighting systems is in LED technology

We have enlightening arguments to back up our claim

LED lamps currently provide the most advanced and long-term cost-effective lighting concept on the market. They are much more efficient, compact, robust and durable than conventional strip lights - and far easier to handle.



Temperature-insensitive

LED lamps are considerably less sensitive to extreme temperatures and temperature fluctuations than conventional forms of lighting.



Well protected

Enclosures with enhanced IP protection classes make FieldPower® LED lamps impervious to the ingress of dirt and moisture.



Vibration-resistant

LED lamps continue to work reliably for long periods even when subjected to strong vibrations. This allows them to be used in all locations and reduces the cost of maintenance and replacements.



Shock-resistant

Even severe shocks have hardly any impact on LED lamps. This makes them easy to transport and also reduces downtimes for installation and replacements.

DC



100 % Full power in an instant

LED lamps achieve full luminosity the moment they are switched on - even in emergency mode. Their fast response behaviour means that visual warning and error messages are also an option.

DC input

A wide input range of 24 V DC to 120 V DC makes LED lamps suitable in all sections of a wind turbine.

Exceptional energy efficiency

The high energy efficiency of LED lights make them economical to use over the long term in all areas of wind turbine applications.

Cost-effective installation

Volts from 24 V DC to 120 V DC enable conductors with small cross sections to be used. This significantly reduces materials and investment costs.



Your systems require a reliable power supply

With our connectivity solutions you are permanently supplied



The choice of device connection technology often has a significant bearing on the economics of the system. To ensure you are permanently connected, we provide you with a power supply solution that is precisely tailored to all the relevant requirements and environmental conditions. This includes everything from the most suitable power supply unit thorough to a central UPS with battery and any additional modules that may be required.

Power supplies

Switched-mode power supplies from the PROmax series are the robust and high-performance connectivity solution for the wind energy sector. Even continuous overloads or short-term peak loads of 300 percent hardly have an impact on them. We provide you with suitable uninterrupted power supplies and electronic fuses. A multitude of approvals mean that our PROmax switched-mode power supplies can be used around the world.



UPS and battery modules

The UPS control units are adapted to the SMPS and, in conjunction with the associated battery modules, form a complete DC-UPS system. The system permits backup times ranging from minutes to hours and has been optimised for long battery life. Multiple status relays provide comprehensive condition monitoring.



Control Unit

The remote monitoring system provides status messages on the condition of the lighting and power supply system. This enables maintenance work to be scheduled well in advance, leading to a significant reduction in system maintenance costs.

Remote monitoring can be easily integrated into existing systems. The remote monitoring system also provides optional support for existing warning systems, such as the control of a visual alarm system in the tower.



You want to know if the investment is worth your while We will show you – by way of direct comparison

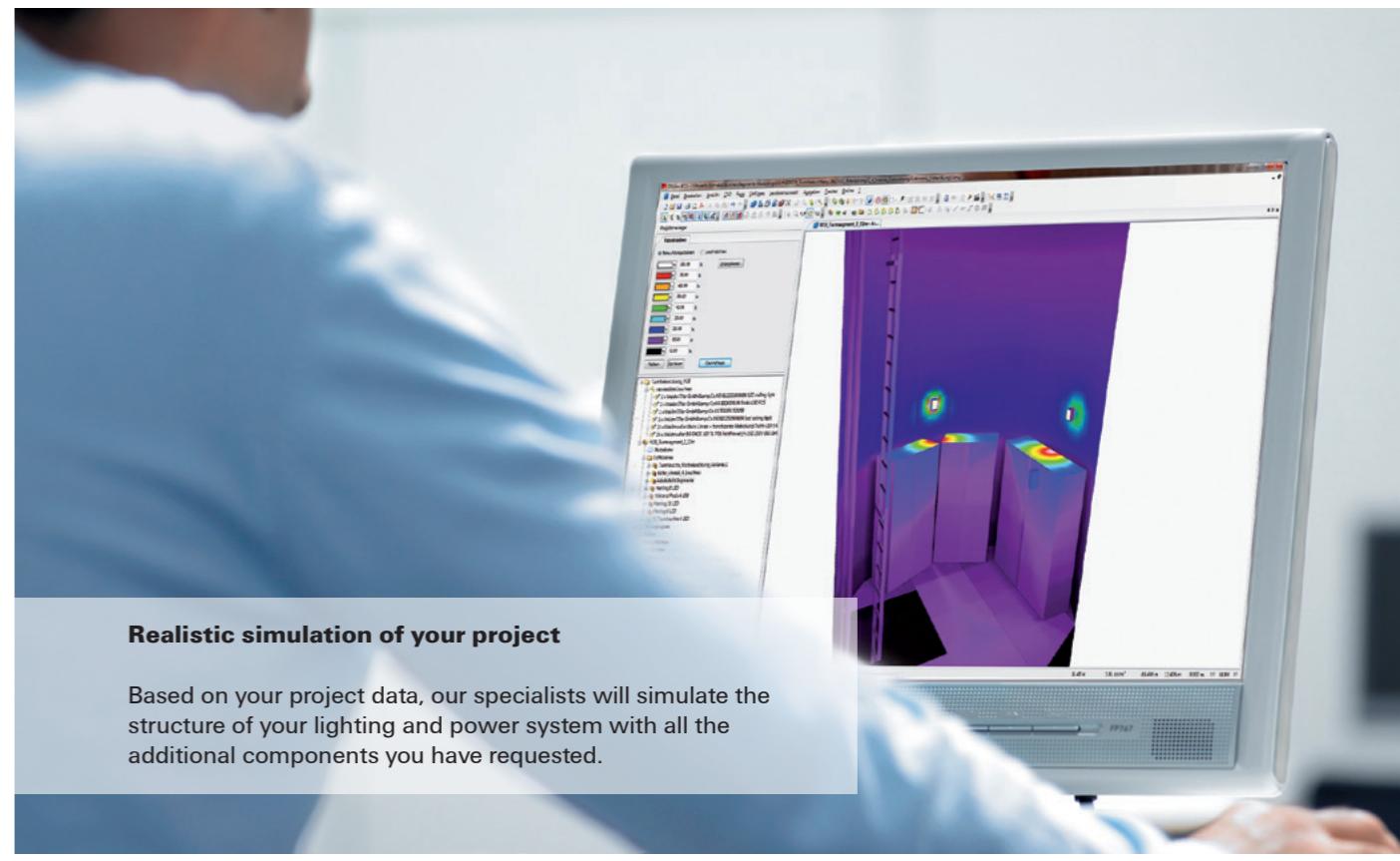
Plant size and type, location, environmental conditions, country-specific standards and regulations: a multitude of factors influence the individual planning of a wind turbine system. For this reason, we want to make sure that our lighting and power concept meets each and every one of your requirements. In a detailed simulation, we will show you how our system can be integrated in your wind turbines – as well as explaining exactly how you will benefit. The service is free and without obligation.

Totally secure: our project support



Gathering of project data

We will help you work out the exact requirements for your wind turbines and prepare your data for import into our simulation software.



Realistic simulation of your project

Based on your project data, our specialists will simulate the structure of your lighting and power system with all the additional components you have requested.



Active planning support

Once we have determined all the necessary components, we will guide you through the application-specific planning and implementation of your customised lighting and power supply concept.

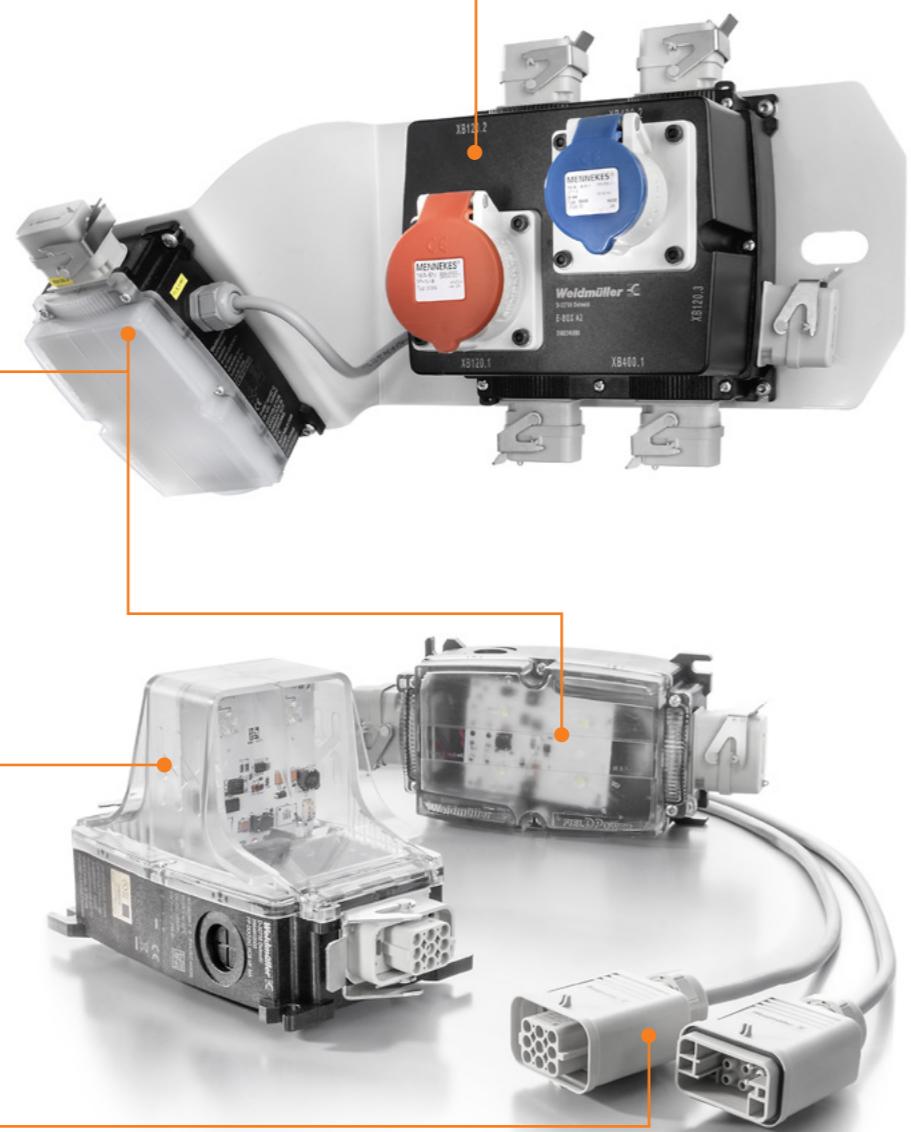
You benefit from the advantages of a system solution

We supply you with everything from a single source

FieldPower® Wind Energy has everything you need to light up the interior of your wind turbines and supply them with power. In keeping with the Weidmüller FieldPower® series, which has proven its worth many times over, the innovative system solution cuts an impressive figure with its high efficiency and practical handling.

FieldPower® Mono LED FieldPower® Mono LED K

Non-directional lighting for illuminating entire rooms and larger areas. Provides optimum working conditions in the nacelle, hub and on the platforms.



FieldPower® Duo LED

Lights facing both upwards and downwards for lighting up the wall area. Ideal for illuminating the ladders in the tower.

Pre-assembled cables

On request, we can supply power cables assembled according to your individual requirements. They are ready to install and equipped with our proven plug-in connectors.

Individual outlets

The FieldPower® system enables customised use of compact power outlets at all levels and in all locations. This means that service staff, for instance, always have perfect access to power and thus save valuable time.

Feed-In Box

For 48V DC feed-in to our Fieldpower LED tower lighting. In the event of power loss, continued operation is ensured for 60 minutes.



Complete power supply system

We provide you with a power supply solution that is precisely tailored to specific requirements and environmental conditions. This includes everything from the power supply unit through to a UPS with central battery and any suitable add-on modules.

Control Unit

The remote monitoring system provides status messages on the condition of the lighting system and can be easily integrated into existing wind farm systems. It also provides an option for controlling a visual alarm system in the tower as a perfect complement to existing monitoring systems.



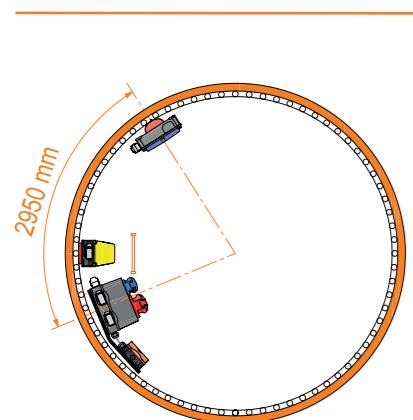
LED customized solution

That's how your tower solution could look like

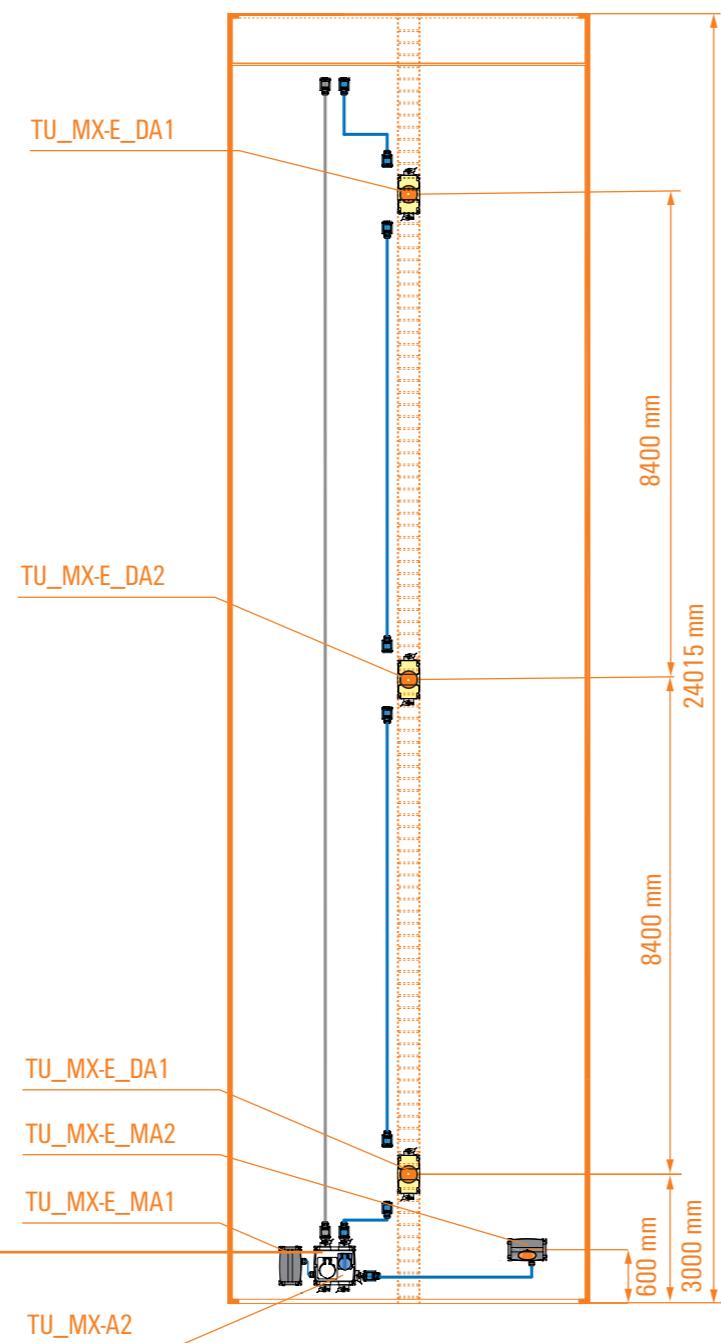
Pre-assembled system acc.to customers demands for wind turbine generators

- Non-directional lighting for illuminating entire rooms and larger areas. Provides optimum working conditions in the nacelle, hub and on the platforms.
- Easy fixing along cable channel or with magnets
- Fixing plates of LEDs and Outlet boxes up to 100% customised acc. to customer needs
- Pluggable segment to segment
- Reduced cable sizes
- Defined labeling of all components acc. to E-Plan and installation manual
- Individual, easy fitting packages of all components

Tested LED strings →
reduced test procedure @ tower manufacturer
Easy expansion, platform concept



Exemplary technical drawing of one tower segment



Feed-in Box

- Power supply PRO MAX
- Fuse protection device
- Control Unit WCU for inspection and alert
- Test mode battery
- 230 V Schuko, 230 V CEE, 400 V CEE
- Cooling fan/ Heating (option)
- On / Off Switch, Status LEDs
- Multiplug feed-in (Harting or compatibel)
- Supply LED strings AC/DC
- Supply Outlets 230 V / 400 V
- Details acc. to customers Specs



Directional lighting for illuminating the tower

FP Duo LED DC HQ8



FP Duo LED DC SA



Technical data

Rated data to EN 60598-1

Rated voltage
Variable-voltage input
Power rating/power loss
Inrush current

General data

Overvoltage category pollution degree

Elevation

Insulation voltage

Mounting position

Protection class to IEC 60529

Protection class

Ambient temperature (operational/storage)

Halogen-free/silicone-free

LED operating life

Resistance to vibration, sinusoidal, stationary

Amplitude deflection

Amplitude acceleration

Resistance to shock, portable

Peak acceleration, type L

Short-circuit protection

Light colour (CCT)

Light current

Efficiency class (to EU Ordinance No. 874/2012)

EMC

Noise emission

Noise immunity tests

Connection data

Type of connection

Line type

Wire cross-section (connecting line)

Approvals

Standard

Fire specification to UL 94

Ordering data

24...120 V DC

21.6 V...144 V DC/reverse polarity protected

5 W

0.2 A (24 V DC)

II/2

≤ 3.000 m

< 500 V (housing / PE)

any

IP 54

2

-40 °C...+60 °C/-40 °C...+70 °C

no (PVC conductor)/yes

> 50.000 hrs

EN 60721-3-3, Klasse 3M3

1.5 mm (2-9 Hz)

5 m/s² (0.5 G) (at 9-200 Hz)

EN 60721-3-3, Klasse 3M3

70 m/s² (7 G)

intern

Cool White, 6.000 K

496 lm (both directions in total)

A+

Acc. to EN 55015

Acc. to EN 61547

Plug-in connector with fixed number of poles, HQ 4/2

open conductor end /length 2 m

Heluwind WK 103w-Torsion 2 x 2,5 mm²

0.5 mm²...2.5 mm² (HQ 2.5)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Noise emission

Noise immunity tests

Acc. to EN 55015

Acc. to EN 61547

Open conductor end /length 2 m

Heluwind WK 103w-Torsion 2 x 2,5 mm²

0.5 mm²...2.5 mm² (HQ 2.5)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

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nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

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Wire cross-section (connecting line)

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Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 55015

nach EN 61547

Type of connection

Line type

Wire cross-section (connecting line)

Standard

UL 1598 / GL / CSA

VO

Noise immunity tests

Acc. to EN 5

Optima surface illumination in DC environments

FP Mono LED K DC HQ8



FP Mono LED K DC SA



Technical data

Rated data to EN 60598-1

Rated voltage
Variable-voltage input
Power rating/power loss

Inrush current

General data

Overvoltage category pollution degree

Elevation

Insulation voltage

Mounting position
Protection class to IEC 60529

Protection class

Ambient temperature (operational/storage)

Halogen-free/silicone-free

LED operating life

Resistance to vibration, sinusoidal, stationary

Amplitude deflection

Amplitude acceleration

Resistance to shock, portable

Peak acceleration, type L
Short-circuit protection

Light colour (CCT)

Light current

Efficiency class (to EU Ordinance No. 874/2012)

EMC

Noise emission

Noise immunity tests

Connection data

Type of connection

Line type
Wire cross-section (connecting line)

Standard
Fire specification to UL 94

Ordering data

24...120 V DC

21.6 V...144 V DC/reverse polarity protected

5 W

0.2 A (24 V DC)

II / 2

≤ 3.000 m

< 500 V (housing/PE)

any

IP 54

2

-40 °C...+60 °C/-40 °C...+70 °C

no (PVC conductor)/yes

> 50.000 hrs

EN 60721-3-3, Class 3M3

1.5 mm (2-9 Hz)

5 m/s² (0.5 G) (at 9-200 Hz)

EN 60721-3-3, Class 3M3

70 m/s² (7 G)

internal

Cool White, 6.000 K

454 lm

A

Acc. to EN 55015

Acc. to EN 61547

Plug-in connector with fixed number of poles, HQ 4/2

open conductor end/length 2 m

Heluwind WK 103w-Torsion 2 x 2.5 mm²

0.5 mm²...2.5 mm²

UL 1598 / GL / CSA

VO

Type

Qty

Order No.

FP MONO LED K DC HQ8

1

1507050000

24...120 V DC

21.6 V...144 V DC/reverse polarity protected

5 W

0.2 A (24 V DC)

II / 2

≤ 3.000 m

< 500 V (housing/PE)

any

IP 54 / IP 65*

2

-40 °C...+60 °C/-40 °C...+70 °C

no (PVC conductor)/yes

> 50.000 hrs

EN 60721-3-3, Class 3M3

1.5 mm (2-9 Hz)

5 m/s² (0.5 G) (at 9-200 Hz)

EN 60721-3-3, Class 3M3

70 m/s² (7 G)

internal

Cool White, 6.000 K

454 lm

A

Acc. to EN 55015

Acc. to EN 61547

open conductor end/length 2 m

Heluwind WK 103w-Torsion 2 x 2.5 mm²

0.5 mm²...2.5 mm²

UL 1598 / GL / CSA

VO

Type

Qty

Order No.

FP MONO LED K DC SA

1

1507040000

Markers (self-adhesive)

Type

Qty

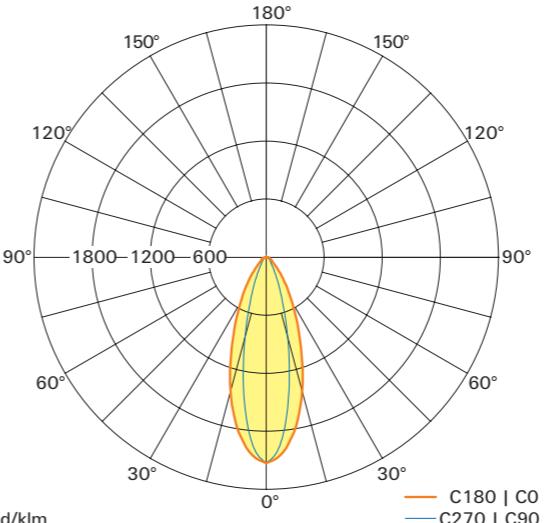
Order No.

THM MT30x 38/17

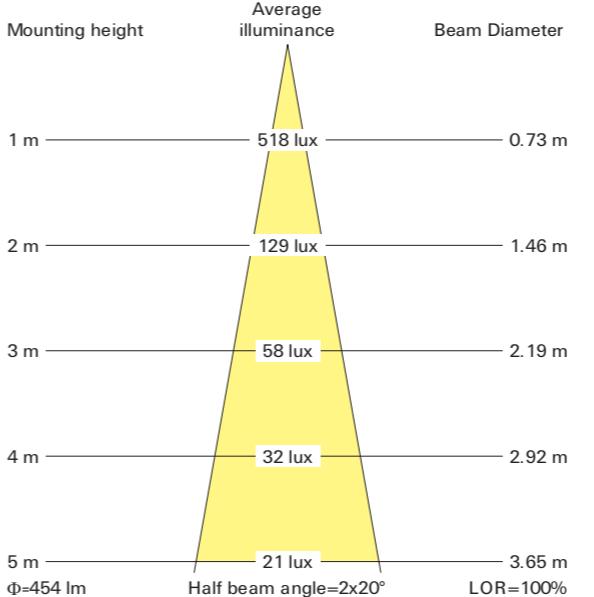
Reel

1011610000

FP MONO LED K DC HQ8



FP MONO LED K DC HQ8



Technical Description

Designation
Manufacturers
Catalogue numbe

FP MONO LED K DC HQ8
Weidmüller
1507050000

Light exit
Lamps

Cuboid 0.148 x 0.100 x 0.010 m

Nominal luminous flux

454 lm

Nominal power

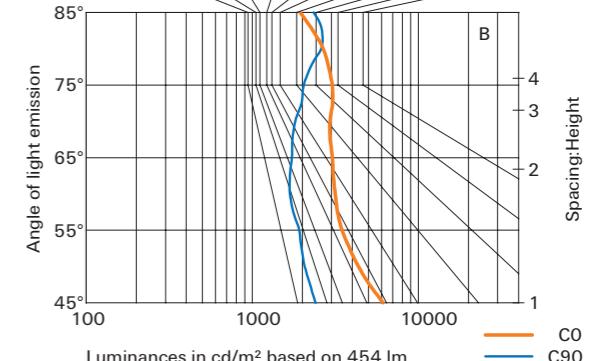
4.4 W

LOR

100 %

Söllner

CIE DIN	Nominal Illuminance (lx)				
	A	B	C	D	E
A	2000	1000	750	500	300
B	1	2000	1500	1000	500
C			2000	1000	300
D	2			2000	1000
E	3				2000



Classification

LiTG A71

EN

BZ

UTE 0.99 A + 0.01 T

CIE Flux Codes 83 93 98 99 100

Optimum surface illumination for AC and DC environments

FP Mono LED DC HQ8



FP Mono LED DC SA



BG GHDE LED TL M4 PT6



BG GHDE LED TL PT6



Technical data

Rated data to EN 60598-1

Rated voltage

24...120 V DC

Variable-voltage input

21,6 V...144 V DC/reverse polarity protected

Power rating/power loss

5 W

Inrush current

0.2 A (24 V DC)

General data

Overvoltage category pollution degree

II / 2

Elevation

≤ 3.000 m

Insulation voltage

< 500 V (housing / PE)

Mounting position

any

Protection class to IEC 60529

IP 54

Protection class

-40 °C...+60 °C/-40 °C...+70 °C

Ambient temperature (operational/storage)

no (PVC conductor)/yes

Halogen-free/silicone-free

no (PVC conductor)/yes

LED operating life

> 50.000 hrs

Resistance to vibration, sinusoidal, stationary

EN 60721-3-3, Class 3M3

Amplitude deflection

1.5 mm (2-9 Hz)

Amplitude acceleration

5 m/s² (0.5 G) (at 9-200 Hz)

Resistance to shock, portable

EN 60721-3-3, Class 3M3

Peak acceleration, type L

70 m/s² (7 G)

Short-circuit protection

internal

Light colour (CCT)

Cool White, 6.000 K

Light current

393 lm

Efficiency class (to EU Ordinance No. 874/2012)

A

EMC

Noise emission

Acc. to EN 55015

Noise immunity tests

Acc. to EN 61547

Connection data

Type of connection

Plug-in connector with fixed number of poles, HQ 4/2

Line type

open conductor end /length 2 m
Heluwind WK 103w-T-Torsion 2 x 2.5 mm²

Wire cross-section (connecting line)

0.5 mm²... 2.5 mm²

Approvals

Standard

UL 1598 / GL / CSA

Fire specification to UL 94

VO

Ordering data

Type	Qty	Order No.
FP MONO LED DC HQ8	1	1488530000

Type	Qty	Order No.
FP MONO LED DC SA	1	1488520000

Accessories

Markers (self-adhesive)

Type	Qty	Order No.
THM MT30x 38/17	Reel	1011610000

Type	Qty	Order No.
THM MT30x 38/17	Reel	1011610000

Technical data

Rated data to EN 60598-1

Rated voltage

265 V

Variable-voltage input

100...265 V DC + AC (45...65 Hz)

Power rating/power loss

7 W < 2 W

Inrush current

0.5 A / 0.1 ms

General data

Overvoltage category pollution degree

II / 2

Elevation

≤ 3.000 m

Insulation voltage

< 500 V (housing / PE)

Mounting position

any

Protection class to IEC 60529

IP 65 when mounted

Protection class

2

Ambient temperature (operational/storage)

-40 °C...+60 °C/-40 °C...+70 °C

Halogen-free/silicone-free

no (PVC conductor)/yes

LED operating life

> 50.000 hrs

Resistance to vibration, sinusoidal, stationary

EN 60721-3-3, Class 3M3

Amplitude deflection

1.5 mm (2-9 Hz)

Amplitude acceleration

5 m/s² (0.5 G) (at 9-200 Hz)

Resistance to shock, portable

EN 60721-3-3, Class 3M3

Peak acceleration, type L

70 m/s² (7 G)

Short-circuit protection

internal

Circuit breaker

< 10 A

Light colour (CCT)

Cool White, 6.000 K

Light current

393 lm

EMC

Noise emission

Acc. to EN 55015

Noise immunity tests

Acc. to EN 61547

Connection data

Type of connection

open conductor end /length 2 m

Line type

Heluwind WK 103w-T 3G1.5 (AD 8 mm)

Note

Mounting: direct mounting on a stainless steel mounting plate with four metric M4 screws.

Conductor gasket: cable gland M16 order separately

Note the maximum thread lengths of the glands.

Approvals

Standard

UL 1598

Fire specification to UL 94

VO

Rated voltage

120 VAC

Ordering data

Type	Qty	Order No.
BG GHDE LED TL M4 PT6	1	1390870000

Type	Qty	Order No.
BG GHDE LED TL PT6	1	1390850000

BG GHDE LED TL PT6



Technical data

Rated data to EN 60598-1

Rated voltage	265 V
Variable-voltage input	100...265 V DC + AC (45...65 Hz)
Power rating /power loss	7 W/< 2 W
Inrush current	0.5 A / 0.1 ms

General data

Overvoltage category pollution degree	II / 2
Elevation	≤ 3.000 m
Insulation voltage	< 500 V (housing /PE)
Mounting position	any
Protection class to IEC 60529	IP 65 when mounted
Protection class	2
Ambient temperature (operational/storage)	-40 °C...+60 °C / -40 °C...+70 °C
Halogen-free /silicone-free	no (PVC conductor) /yes
LED operating life	> 50.000 hrs
Resistance to vibration, sinusoidal, stationary	EN 60721-3-3, Class 3M3
Amplitude deflection	1.5 mm (2-9 Hz)
Amplitude acceleration	5 m/s ² (0.5 G) (at 9-200 Hz)
Resistance to shock, portable	EN 60721-3-3, Class 3M3
Peak acceleration, type L	70 m/s ² (7 G)
Short-circuit protection	internal
Circuit breaker	< 10 A
Light colour (CCT)	Cool White, 6.000 K
Light current	393 lm

EMC

Noise emission

Noise immunity tests

Connection data

Type of connection

Line type

Note

265 V
100...265 V DC + AC (45...65 Hz)
7 W/< 2 W
0.5 A / 0.1 ms

Mounting options

LED module installed on bottom housing section
GH PT6 (1070140000), with contact terminal
PT6 (1957620000).



Approvals

Standard

Fire specification to UL 94

Rated voltage

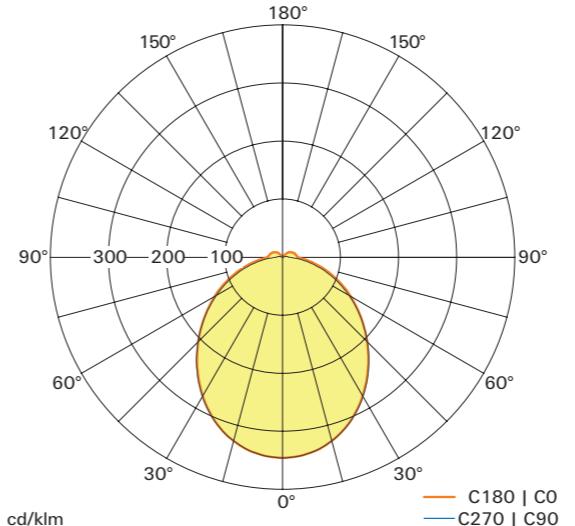
UL 1598
VO

120 VAC

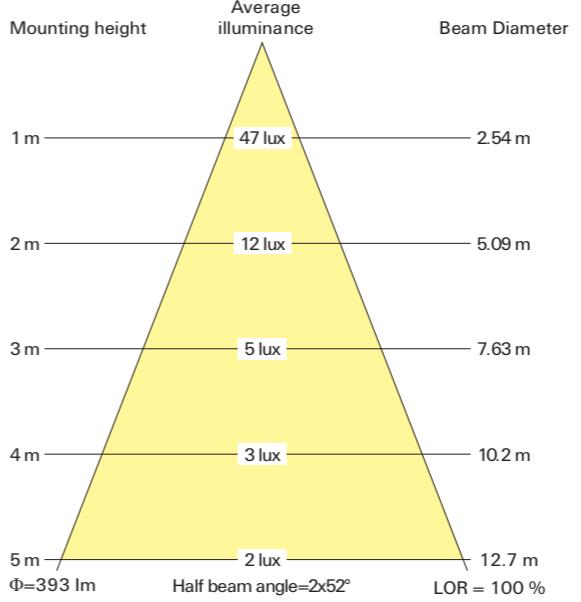
Ordering data

Type	Qty	Order No.
BG GHDE LED TL PTS 4	1	1390880000

FP MONO LED DC HQ8

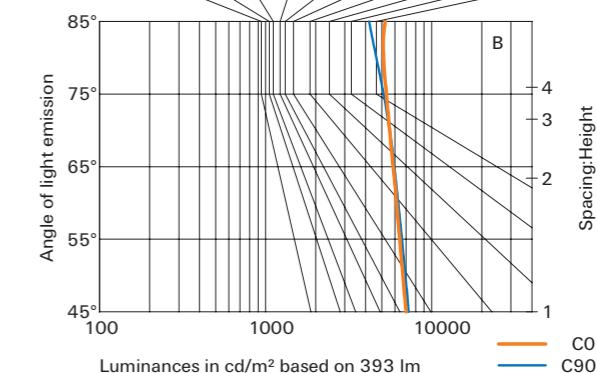


FP MONO LED DC HQ8



Söllner

CIE	DIN	Nominal Illuminance (lx)					
		A	A	2000	1000	750	500
A	1	2000	1500	1000	750	500	300
B				2000	1000	500	300
C					1000	500	300
D	2			2000	1000	500	300
E	3				2000	1000	500
						300	



Classification

LiTG	A41
EN	
BZ	
UTE	0.94 D + 0.06 T
CIE Flux Codes	47 77 93 94 100

Technical Description

Designation	FP MONO LED DC HQ8
Manufacturers	Weidmueller
Catalogue number	1488530000
Light exit	Cuboid 0.148 x 0.100 x 0.010 m
Lamps	1 x LED 5 W
Nominal luminous flux	393 lm
Nominal power	4.8 W
LOR	100 %

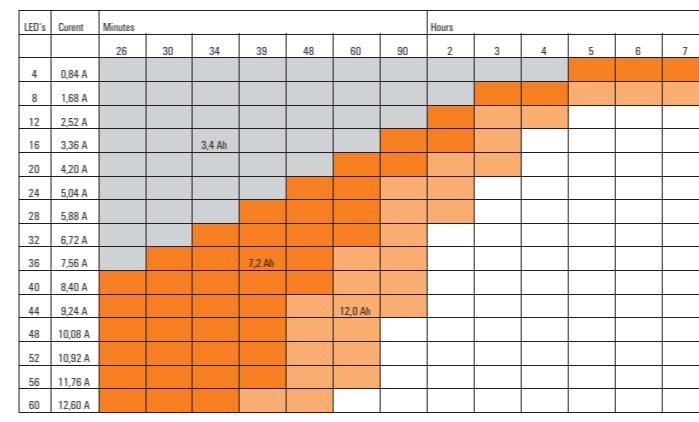
Convenient and economical remote maintenance

Control Unit WCU 501	
X1 SUPPLY	X2 IN/OUT
Technical data	
Input	
Input fuse (external)	max. 5 A
Current consumption	< 4 mA
Operating voltage	7 V DC...32 V DC
Electrical connection	
Connection cross-section, min./max.	0.25 mm² / 1.5 mm²
Wire connection method	PUSH IN
General data	
Ambient temperature (operational/storage)	-40 °C...+70 °C / -40 °C...+70 °C
Type of protection	IP 20
Safety	Watch, Fail-Safe Clock
Enclosure material	Acrylnitril-Butadien-Styrol (ABS)
Grouting material	Polyurethane (PU)
Programmable, interface	miCon-L (graphical), RS232
EMV / shock / vibration	
Shock resistance	min. 100 m/s² (10 G)
Vibration resistance	min. 50 m/s² (5 G) bei 10...100 Hz
Digital input IN1-IN2	
U _N	0-30 V DC
U _{LOW}	≤ 5 V DC
f _N	≤ 1 kHz
R _I	> 30 kΩ
U _{HIGH}	> 5 V DC
I _N	≥ 1 ms
Analogue input IN3-IN5	
U _N	0-30 V DC
R _I	> 11 kΩ
Accuracy IN3-IN5	
Accuracy ADC	+/- 3 % (0.5 V DC) 10 Bit
Output OUT1-OUT4	
I _{OUT}	1.5 A
U _{OUT} = U _N	-0.45 V
I _{TOT}	≤ 4 A
PWM output OUT5	
I _{OUT}	≤ 2 A
U _{OUT}	≤ GND + 0.25 V
f _{OUT}	1-5 kHz
s	500 Hz
Conformity / standards	
Conformity	2008/95/EG; 2004/108/EG
Standards	EN 60730-1; EN 61010-1; EN 50081-1; EN 50082-1; EN 60068-2-78:2002; EN 60068-2-6:2008; ISO 16750-3:2007
Ordering data	
Type	Order No.
Control Unit WCU 501	1517130000
Accessories	
Type	Order No.
Starter Kit WCU 501	1548720000

Sufficiently high performance – at any time PROmax power supplies and UPS modules

Type	Input side			Output side			Additional Functions		Recommended application	Order No.
	Phases	AC input voltage [V]	DC input voltage [V]	Rated voltage [V]	Rated current [A]	Power rating [W]	Derating at [°C]	Power Boost [60 s]		
PROmax										
PRO MAX 72 W 24 V 3 A	1	85-277	80-370	24	3	72			Status relay	90
PRO MAX 120 W 24 V 5 A	1	85-277	80-370	24	5	120			Side-by-side connectability	90
PRO MAX 180 W 24 V 7.5 A	1	85-277	80-370	24	7.5	180				91
PRO MAX 240 W 24 V 10 A	1	85-277	80-370	24	10	240				91
PRO MAX 480 W 24 V 20 A	1	85-277	80-370	24	20	480				91.5
PRO MAX 960 W 24 V 40 A	1	85-277	80-370	24	40	960				92.5
PRO MAX3 120 W 24 V 5 A	3	3 x 320-3 x 575	450-800	24	5	120				90
PRO MAX3 240 W 24 V 10 A	3	3 x 320-3 x 575	450-800	24	10	240				91
PRO MAX3 480 W 24 V 20 A	3	3 x 320-3 x 575	450-800	24	20	480				91.5
PRO MAX3 960 W 24 V 40 A	3	3 x 320-3 x 575	450-800	24	40	960				92.5

Type	Input		Output		Additional Functions		Order No.	
	DC input voltage [V]	Rated voltage [V]	Rated current [A]	Power rating [W]	Status relay	Parallel connection option	Side-by-side connectability	
UPS								
CP DC BUFFER 24 V 20 A		22.5-30	24	20	480	●	●	-25 to +70
CP DC UPS 24 V 20 A/10 A		20-30	U _o -0.3 V	20/10	480/240	●	●	c UL us
CP DC UPS 24 V 40 A		20-30	U _o -0.3 V	40	960	●	●	c UL us
CP A BATTERY 24 V DC 1.3 Ah			24	10 A / 11.3 min	1.3 Ah	≤ 2	●	1406930000
CP A BATTERY 24 V DC 3.4 Ah			24	10 A / 11.3 min	3.4 Ah	≤ 2	●	1251070000
CP A BATTERY 24 V DC 7,2 Ah			24	10 A / 26.5 min	7.2 Ah	≤ 2	●	1251080000
CP A BATTERY 24 V DC 12 Ah			24	10 A / 51 min	12 Ah	≤ 2	●	1251090000
CP A BATTERY 24 V DC 17 Ah			24	10 A / 81 min	17 Ah	≤ 2	●	1251110000



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- WAVE TTA measuring transducer for underspeed and overspeed detection

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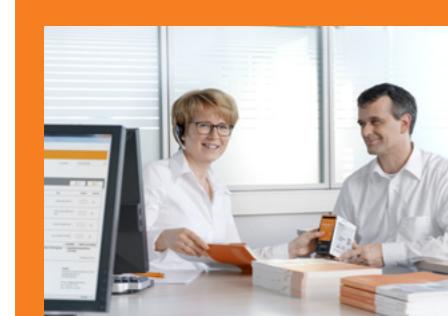
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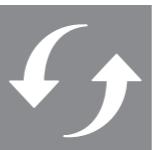
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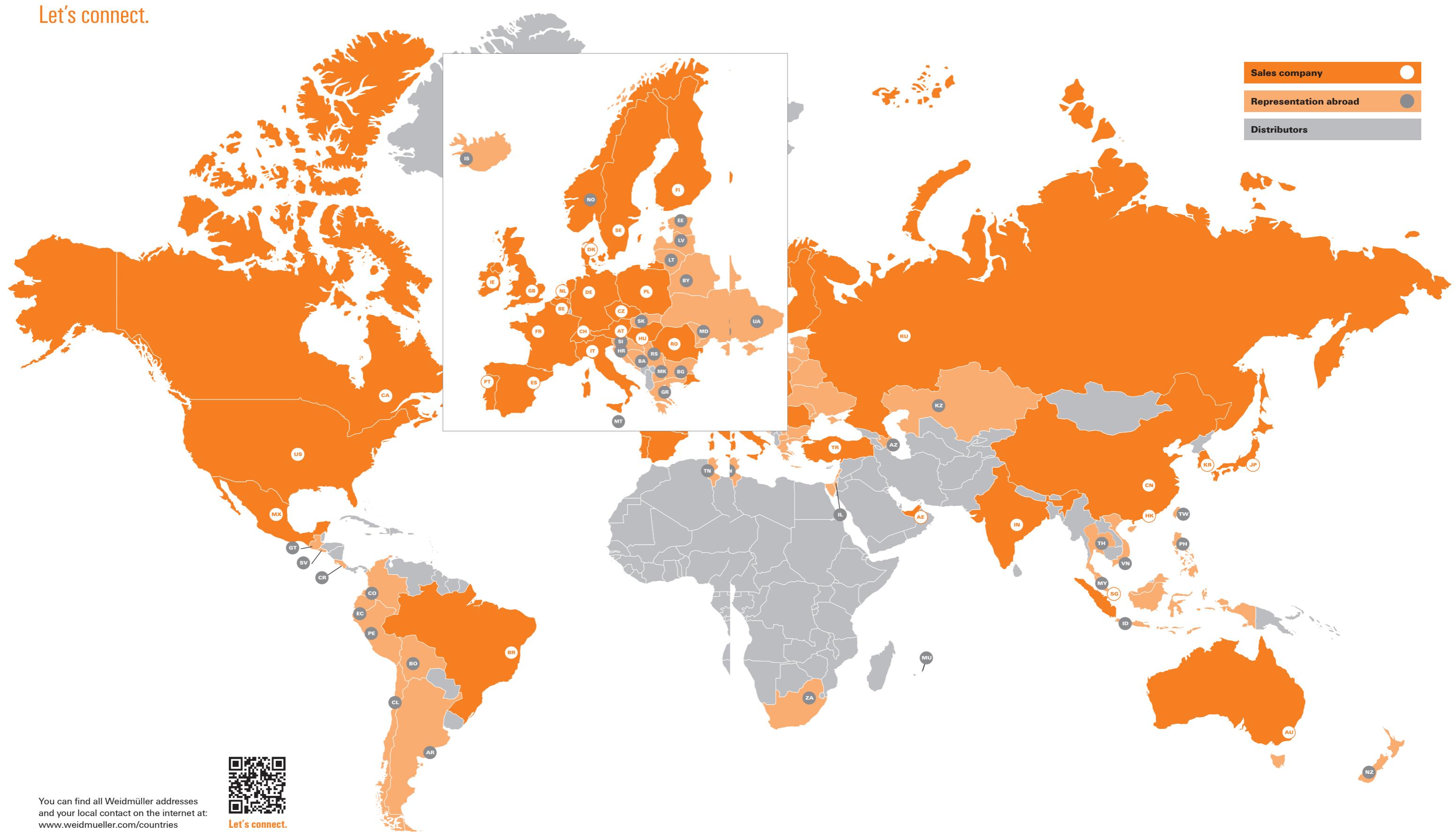


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