

# LUMINAIRE EXPLODED VIEW PIN 1-2-3 R

**ELG DRIVER.**  
DALI CONTROL (DA)  
OR SMART TIMER  
DIMMING (D2)  
(OPTIONAL)

**HLG DRIVER**  
DRIVER  
(STANDARD)

EQUALIZING PRESSURE  
VALVE WITH  
NANOTECHNOLOGY  
MEMBRANE

HOUSING AND COVER IN  
ALUMINIUM CASTING  
(BATTERY OPTIONAL)

IONIZED PAINTING IN  
A 200° DRYING OVEN.  
STANDARD:  
RAL-GREY 2150 COLOR  
(ANY COLOR OPTIONAL)  
10 YEARS WARRANTY

ALUMINIUM  
REFLECTOR  
COVER OPTIONAL

WAGO INTERNAL  
CONNECTORS

IP68  
CONNECTORS

STAIN STEEL  
SCREWS

**FASTENING CABLES**  
(OPTIONAL  
HEIGHT ADJUSTMENT)

**FASTENING EYEBOLT**  
(OPTIONAL)

**FASTENING BRACKET**  
(OPTIONAL)

**SMART LIGHTING MODULE + ANTENNA + MANAGEMENT SOFTWARE**  
(OPTIONAL)

**GLASS LENSES (IK08)**  
B1 - C - E - EF - RC - RD

**MICROLED PLUS**  
4.500° K - 5.500° K

**WIRELESS MOTION DETECTOR**  
(OPTIONAL FOR SMART LIGHTING)

**WIRELESS LIGHT LEVEL SENSOR**  
(OPTIONAL FOR SMART LIGHTING)

**PIN-1R**

**PIN-2R**

**PIN-3R**

www.microplusgermany.com

**75%**

**100%**

**100%**

**75%**

**50%**

**WIRELESS MOTION DETECTOR**

**WIRELESS LIGHT LEVEL SENSOR**

**SMART LIGHTING OPTION**

It doesn't need any kind of further refurbishment, since is a **wireless technology**.

It allows to change the **turning on** and **off** and the **dimming** of the light level at any luminaire from a remote way, which increase the **energy saving**.

You can monitor the system information and manage the failure alarms in the light points.

**PROFESIONAL LIGHT FOR INDUSTRIAL BUILDINGS**

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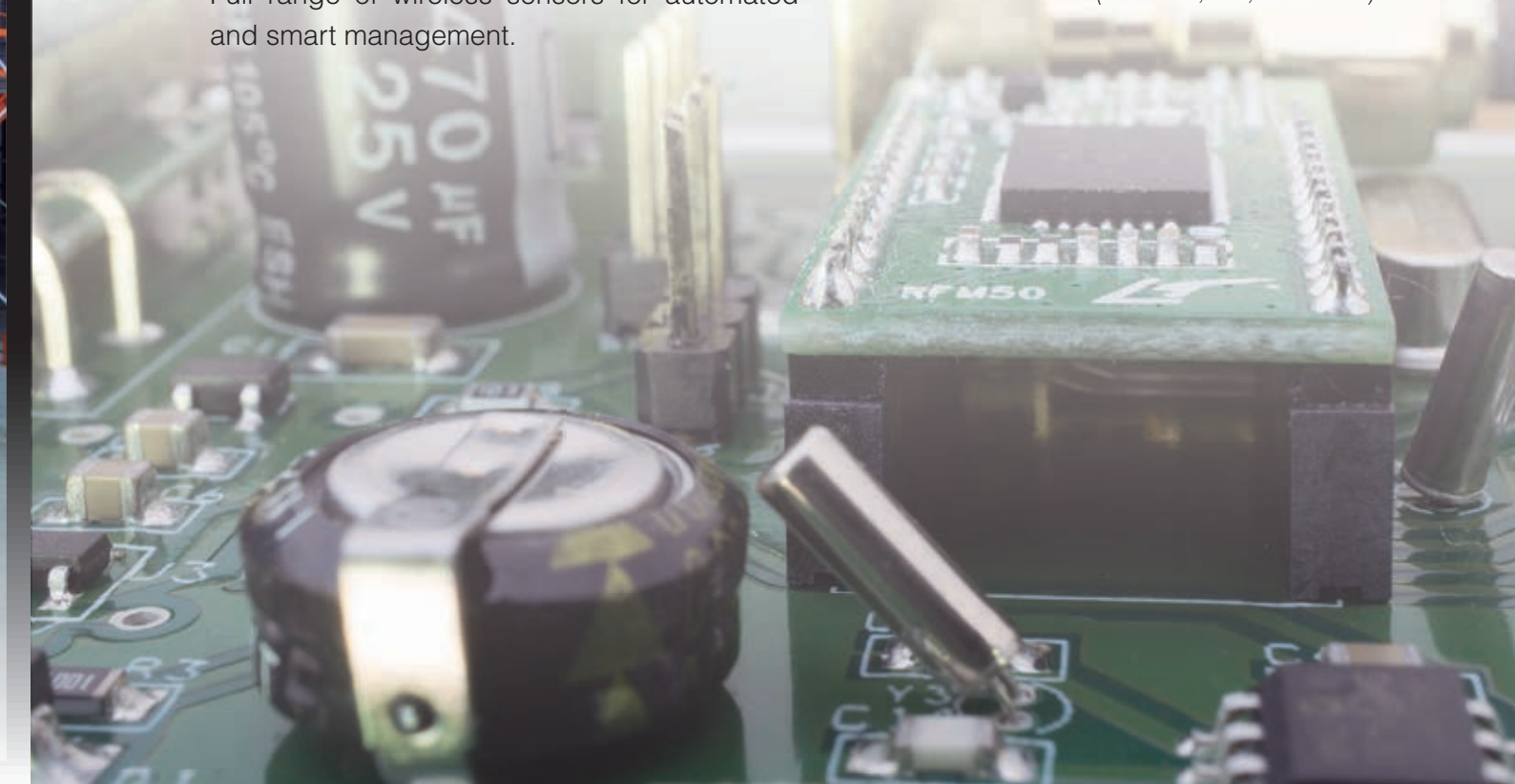
## SMART LIGHTING ADVANTAGES MICROPLUS GERMANY

- Our smart lighting system is an advanced mesh communication system where the luminaires connect to each other to provide coverage over great distances.
- The integrated control in each luminaire gives us information about each one and allows us to set the parameters in a remote way.
- Surge protection system scalable. Protecting the rest of the luminaire (standard version 140J, 8kA).
- Emitting power: 20dBm at 868MHz.
- Detailed information on the consumption of the installation.
- Built-in memory in each luminaire to store the different schedules and allow "alone" mode. Avoiding any problems during maintenance or blackouts.
- Central control system available for local or remote setting.
- Customized software for every situation. Based on the IBM Node-RED environment for fit to any solution.
- Cross-platform control (Windows, iOS, Android, etc). From a web application available for any browser to native applications for different OS.
- The remote control allows management of the installation without the need for operator displacement. Incidents detected in real time.
- Full range of wireless sensors for automated and smart management.



The Microplus Germany smart lighting system is cross-platform (Windows, iOS, Android...)

www.microplusgermany.com





www.microplusgermany.com

**PIN-2H**  
60-180w  
90 - 305Vac • 50/60Hz • Class I

Die-casting and extruded aluminium spotlight **PIN-2H**, designed with **2 symmetrical lens** for lighting in industrial areas.

10 YEARS WARRANTY 30.000 HOURS CONTINUED SERVICE

TECHNOLOGY MICROLED PLUS 1800 lm/w

REFERENCE	OPTIONS				TECHNICAL CHARACTERISTICS				RETAIL PRICE STANDARD	ADDS				
	CONTROL	RATED POWER	VOLTAGE	TEMPERATURE	LENS	POWER	LUMINOUS FLUX	WEIGHT	SIZE					
PIN-2H	/ST	/060	/VAC	/4.5	/B1	60W	9.000 Lm	9.8 kg	283 x 330 x 154 mm	398 €	DM	25 €		
		/080				80W	12.000 Lm			458 €				
		/100				100W	15.000 Lm			470 €				
		/120				120W	18.000 Lm			498 €				
	/DM	/140	/VDC	/5.5	/E	140W	21.000 Lm	11.8 kg	283 x 330 x 179 mm	590 €			VAC	SAME COST
		/160	/VDC	/5.5	/EF	160W	24.000 Lm			670 €				
		/180	/VDC	/5.5	/G	180W	27.000 Lm			690 €				
		TEMP. °K												
LENS														

OPTIONAL IP67 • (PIN-2HIP) PLANE COVER

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**PIN-4H**  
140-320w  
90 - 305Vac • 50/60Hz • Class I

Die-casting and extruded aluminium spotlight **PIN-4H**, designed with **4 symmetrical lens** for lighting in industrial areas.

10 YEARS WARRANTY 30.000 HOURS CONTINUED SERVICE

TECHNOLOGY MICROLED PLUS 1800 lm/w

REFERENCE	OPTIONS				TECHNICAL CHARACTERISTICS				RETAIL PRICE STANDARD	ADDS				
	CONTROL	RATED POWER	VOLTAGE	TEMPERATURE	LENS	POWER	LUMINOUS FLUX	WEIGHT	SIZE					
PIN-4H	/ST	/140	/VAC	/4.5	/B1	140W	21.000 Lm	12.6 kg	479 x 330 x 154 mm	690 €	DM	25 €		
		/160				160W	24.000 Lm			740 €				
		/180				180W	27.000 Lm			790 €				
		/200				200W	30.000 Lm			830 €				
	/DM	/230	/VDC	/5.5	/E	230W	34.500 Lm	16.9 kg	479 x 330 x 154 mm	870 €			VAC	SAME COST
		/270	/VDC	/5.5	/EF	270W	40.500 Lm			1.100 €				
		/300	/VDC	/5.5	/G	300W	45.000 Lm			1.160 €				
		/320	/VDC	/5.5		320W	48.000 Lm			1.180 €				
TEMP. °K														
LENS														

OPTIONAL IP67 • (PIN-4HIP) PLANE COVER

www.microplusgermany.com

**PIN-6H**  
300-600w  
90 - 305Vac • 50/60Hz • Class I

Die-casting and extruded aluminium spotlight **PIN-6H**, designed with **6 symmetrical lens** for lighting in industrial areas.

10 YEARS WARRANTY 30.000 HOURS CONTINUED SERVICE

TECHNOLOGY MICROLED PLUS 1800 lm/w

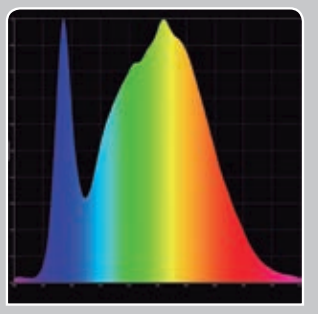
REFERENCE	OPTIONS				TECHNICAL CHARACTERISTICS				RETAIL PRICE STANDARD	ADDS					
	CONTROL	RATED POWER	VOLTAGE	TEMPERATURE	LENS	POWER	LUMINOUS FLUX	WEIGHT	SIZE						
PIN-6H	/ST	/300	/VAC	/4.5	/B1	300W	45.000 Lm	19.1 kg	679 x 330 x 190 mm	1.190 €	VAC	SAME COST			
		/350				350W	52.500 Lm			1.210 €					
		/400				400W	60.000 Lm			1.390 €					
		/480				480W	72.000 Lm			1.600 €					
	/DM	/560	/VDC	/5.5	/E	560W	84.000 Lm	21 kg	679 x 330 x 179 mm	1.670 €			TEMP. °K	SAME COST	
		/600	/VDC	/5.5	/EF	600W	90.000 Lm			1.700 €					
		TEMP. °K													
		LENS													

OPTIONAL IP67 • (PIN-6HIP) PLANE COVER

**MICROPLUS GERMANY**  
www.microplusgermany.com



- Robust structure (better dissipation than the COB technology).
- Unaffected by humidity.
- 4 fixing screws (allows perfect adhesion to aluminum).
- Gold internal wiring (connected in double parallel) to avoid any failure.
- The external wiring (is made with 0.75mm resin wire in order to avoid electronic tracks).
- Waterproofing made with resin (make us to have IP68 protection and different K)
- Emission of light (120° instead of the 180° of the LED).
- Disappearance of light pollution (without emission to the upper hemisphere).
- Maximum lumens (we obtain 180 lumens direct without power, with the driver and lens 140-150 Lm).
- High energy efficiency (from 75% to 86% with remot control management).
- LM80 certificate (up to 100,000 hours).
- Photobiological safety certificate (EN 62471: 2009)
- Definitely is a superchip that place us at the cutting edge of the technologies.



The light spectrum of **MICROLED PLUS** has the best value in the visual efficiency regarding the lambda vision sensitivity curve.

Which means that it is able to obtain a value of white light useful so much more efficient than the rest of light sources.

Better light adapted to human activities and no waste, without hazardous emission in areas of the spectrum not visible. UV or infrared.

**SAFETY AND COMFORT A BEFORE AND AFTER**

The usual technologies so far like sodium vapor and metal halide, had a level of color rendering (Ra <43%) hence the color vision was very different from reality (Ra daylight is 100%).

The Implementation of our Microplus technology with Ra >80%, cause an increase in security, visibility and the perception of reality doing more pleasant and safe the city environment.



**MICROPLUS GERMANY**

**PROFESSIONAL LIGHTING FOR FACTORIES AND WAREHOUSES**



**SAVE** from 75% to 86% of the light bill, just by replacing your old luminaires (sodium vapor, metal halide...) by **MicroPlus Germany** technology and products.



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**PIN-1R**  
30-60w  
90 - 305Vac • 50/60Hz • Class I

Die-casting and round form aluminium spotlight **PIN-1R**, designed with **one symmetric lens** and made to light the industrial environment.

10 YEARS WARRANTY 30.000 HOURS CONTINUED SERVICE

ENERGY SAVER 75% A++

- ENERGY SAVER
- INSTANT START
- UP TO 75% OF ENERGY SAVING
- 75% REDUCTION OF CO2 EMISSIONS
- USEFUL LIFE OF 100,000 HOURS
- NO HAZARDOUS SUBSTANCES

RoHS CE CB

REFERENCE	OPTIONS				TECHNICAL CHARACTERISTICS				RETAIL PRICE STANDARD	ADDS				
	CONTROL	RATED POWER	VOLTAGE	TEMPERATURE	LENS	POWER	LUMINOUS FLUX	WEIGHT	SIZE					
PIN-1R	/ST	/030	/VAC	/4.5	/B1	30W	4.500 Lm	7.50 kg	370 x 230 mm	330 €	TG	1.800€		
		/040				40W	6.000 Lm			340 €				
		/050				50W	7.500 Lm			350 €				
		/060				60W	9.000 Lm			360 €				
	/DM	/100	/VDC	/5.5	/E	100W	15.000 Lm	7.50 kg	370 x 230 mm	460 €			DM	25 €
		/120	/VDC	/5.5	/E1	120W	18.000 Lm			485 €				
		/140	/VDC	/5.5	/EF	140W	20.300 Lm			500 €				
		/160	/VDC	/5.5	/RC	160W	23.200 Lm			530 €				
TEMP. °K														
LENS														

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**PIN-2R**  
80-160w  
90 - 305Vac • 50/60Hz • Class I

Die-casting and round form aluminium spotlight **PIN-2R**, designed with **two symmetric lenses** and made to light the industrial environment.

10 YEARS WARRANTY 30.000 HOURS CONTINUED SERVICE

ENERGY SAVER 75% A++

- ENERGY SAVER
- INSTANT START
- UP TO 75% OF ENERGY SAVING
- 75% REDUCTION OF CO2 EMISSIONS
- USEFUL LIFE OF 100,000 HOURS
- NO HAZARDOUS SUBSTANCES

RoHS CE CB

REFERENCE	OPTIONS				TECHNICAL CHARACTERISTICS				RETAIL PRICE STANDARD	ADDS				
	CONTROL	RATED POWER	VOLTAGE	TEMPERATURE	LENS	POWER	LUMINOUS FLUX	WEIGHT	SIZE					
PIN-2R	/ST	/080	/VAC	/4.5	/B1	80W	12.000 Lm	7.50 kg	370 x 230 mm	430 €	TG	1.800€		
		/100				100W	15.000 Lm			460 €				
		/120				120W	18.000 Lm			485 €				
		/140				140W	20.300 Lm			500 €				
	/DM	/160	/VDC	/5.5	/E	160W	23.200 Lm	7.90 kg	370 x 230 mm	530 €			DM	25 €
		/180	/VDC	/5.5	/E1	180W	27.000 Lm			590 €				
		/200	/VDC	/5.5	/EF	200W	29.000 Lm			660 €				
		/230	/VDC	/5.5	/RD	230W	33.360 Lm			730 €				
TEMP. °K														
LENS														

www.microplusgermany.com

**PIN-3R**  
160-230w  
90 - 305Vac • 50/60Hz • Class I

Die-casting and round form aluminium spotlight **PIN-3R**, designed with **three symmetric lenses** and made to light the industrial environment.

10 YEARS WARRANTY 30.000 HOURS CONTINUED SERVICE

ENERGY SAVER 75% A++

- ENERGY SAVER
- INSTANT START
- UP TO 75% OF ENERGY SAVING
- 75% REDUCTION OF CO2 EMISSIONS
- USEFUL LIFE OF 100,000 HOURS
- NO HAZARDOUS SUBSTANCES

RoHS CE CB

REFERENCE	OPTIONS				TECHNICAL CHARACTERISTICS				RETAIL PRICE STANDARD	ADDS				
	CONTROL	RATED POWER	VOLTAGE	TEMPERATURE	LENS	POWER	LUMINOUS FLUX	WEIGHT	SIZE					
PIN-3R	/ST	/160	/VAC	/4.5	/B1	160W	24.000 Lm	9.50 kg	470 x 230 mm	550 €	TG	1.800€		
		/180				180W	27.000 Lm			590 €				
		/200				200W	29.000 Lm			660 €				
		/230				230W	33.360 Lm			730 €				
	/DM	/250	/VDC	/5.5	/E	250W	37.500 Lm	9.50 kg	470 x 230 mm	800 €			DM	25 €
		/270	/VDC	/5.5	/E1	270W	40.500 Lm			870 €				
		/290	/VDC	/5.5	/EF	290W	43.500 Lm			940 €				
		/310	/VDC	/5.5	/RD	310W	46.500 Lm			1.010 €				
TEMP. °K														
LENS														