

AES Product Catalogue

Innovations leading the way
to success!

AES 

*»Quality is never an accident ...
it represents the wise choice
of many alternatives.«*

William A. Foster

Introducing our product line...

We offer solutions for tough environments.

The heavy demands within the aviation industry continually push the limits of technical feasibility, creating major challenges for our engineers. Our technical knowledge in of aviation, high quality product standards and services, and an uncompromising focus on our customer's requirements, have made us a reputable international service and product supplier in the aviation industry. Working towards integrated solutions, we specialise in exciting and sophisticated development work.

Today, we possess the ability to engineer complete electrical systems within an aircraft. Our services are available full circle, from electrical engineering and design, to the development and production of electrical and electronic aircraft products and systems. These include LED lighting solutions, power management, digital controls, and telecommunication systems for commercial aircraft cabins and private planes. Our global customers include Airbus and Boeing in addition to other aircraft manufacturers, various commercial airlines, cabin interior and galley manufacturers as

well as completion centres.

Our product portfolio for aircraft cabins includes power supplies, adjustable LED lighting for crew service areas and ambient lighting for cabins. Moreover, we produce light system controllers and panels, as well as auxiliary devices for cabin management systems. Our products are compatible with almost all types of aircraft systems [CIDC ect.] We tailor our products and develop interfaces, which guarantees your system functions completely, all of the time. This ensures that our solutions meet the highest standards of your requirements. Our products and systems can be placed throughout your aircraft cabin, from aisles and galleys to lavatories and seats. We help you create the ideal system for your aircraft, or perhaps that one special part to complete your existing system. We have been a competent business partner in the challenging aviation industry since 1997. We have already started working on tomorrow's aviation technologies because we keep our eyes moving forward.

Our competency centres:



**Light &
Mechanics**



Cabin Networks



Controls



Special & VIP



Power



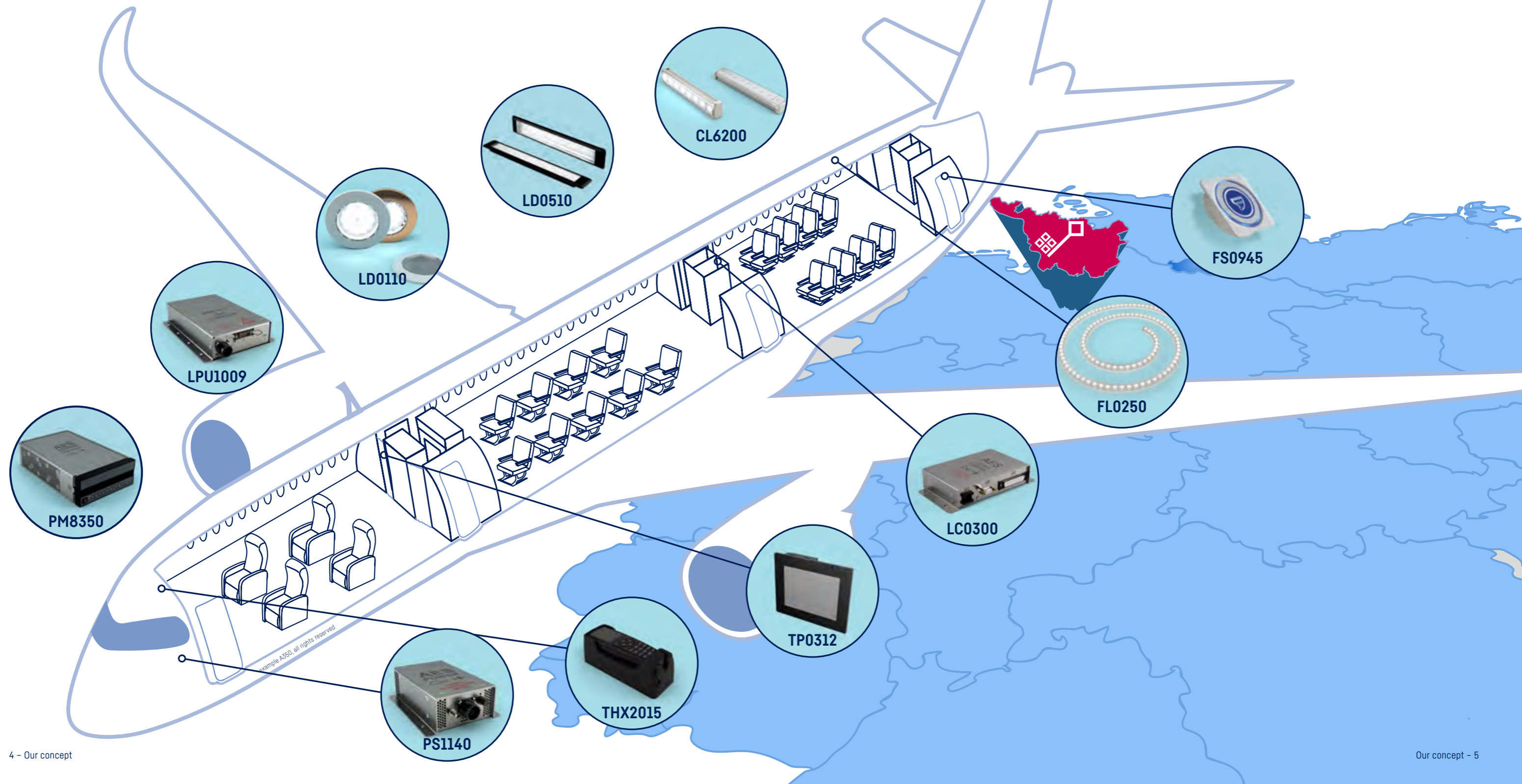
**Electrical
Engineering**

Our concept: products and systems that match your requirements!

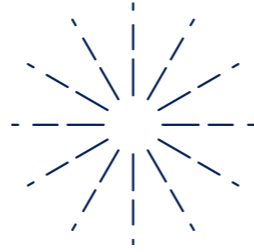
We create smart solutions for aircraft interiors, both electrical and electronic, for environments with a compact, limited installation space. These challenging settings adhere to our customers' individual requirements. Our extensive design and engineering ability is the groundwork for our integrated aircraft products for lighting, power management, control, and telecommunications systems. We are a valued partner for aviation products and system design, offering a vast portfolio of services and long-term support. These include planning and project management, devel-

opment, production, integration, and solutions for both our commercial and our space and maritime clients. Our final assembly of our equipment forward product maintenance quality of our aircraft engi-

other services. We design custom, target-oriented aviation and VIP/private jet customers, along with, Our reliable in-house production completes the ment, components, and systems. Moreover, straight-helps prevent malfunctions and costly downtime. The engineering products is valued by our customers worldwide.



Enlightening your passengers...



Light not only enables us to see things, but it influences our thoughts and feelings and may even affect our health. Light plays an essential part of our everyday lives and even more so when flying.

AES primarily develops and produces aircraft lighting for various applications, with a more detailed focus on LED aircraft lighting. Over time, this has evolved into close working relationships with some prominent LED manufacturers, allowing us access to the latest data and LED developments. As a result, we have extensive knowledge about how LEDs behave in diverse operating and environmental conditions. Today, we can create durable lighting with consistent light quality, incorporating these advantages into other product devel-

opments. Naturally, we meet the requirements of the major aircraft manufacturers in relation to our materials and their attributes, such as corrosion resistance, resilience to aggressive media, and flammability levels. This means our engineers prepare design calculations and conduct analyses, to ensure our construction is sound [e.g. thermal analyses, strength calculations, FEM and reliability analyses, considering EMV requirements].



CL6000 LED Ceiling Light	
designed for various types of Airbus and Boeing aircraft	
+ colour	cool white and warm white
+ voltage	28 V DC or 115 AC
+ consumption	8 15 22 29.5 VA/W
+ dimensions	292 566 873 1180 x 32 x 32.2 mm (l/w/h)
+ weight	0.17 0.3 0.45 0.6 kg
+ fully qualified i.a.w. RTCA-DO160	
BR6005/BR6008 Brackets [*brackets add 2 mm to the width and height]	

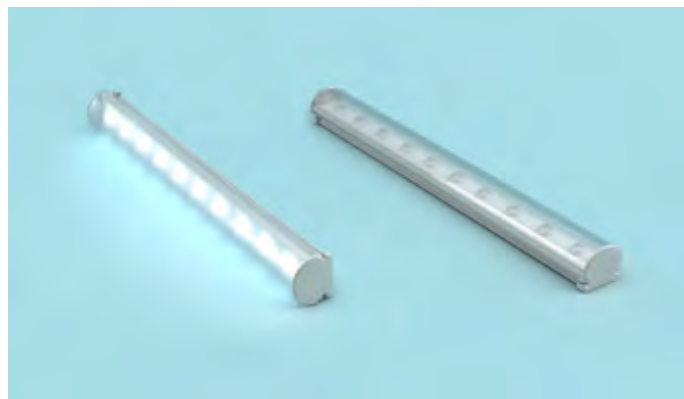


CL6050 LED Ceiling Light	
designed for the Airbus A350	
+ colour	cool white, warm white and RGB+W
+ voltage	28 V DC or 115 AC
+ consumption	8 15 22 29.5 VA/W
+ dimensions	292 566 873 1180 x 32 x 32.2 mm (l/w/h)
+ weight	0.17 0.3 0.45 0.6 kg
+ fully qualified i.a.w. RTCA-DO160 and ABD0100	
BR6005/BR6008 Brackets [*brackets add 2 mm to the width and height]	

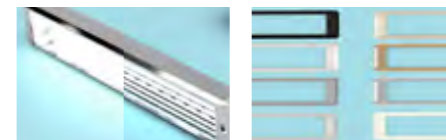


CL6200 RGB+W LED Ceiling Light	
designed for various types of Airbus and Boeing aircraft	
+ colour	cool white, warm white and RGB+W
+ voltage	28 V DC
+ consumption	ca. 18 W per meter
+ dimensions	ca. 80 - 2000 x 18 x 9 mm (l/w/h - length in steps of 25,4 mm)
+ weight	ca. 430g per meter
+ fully qualified i.a.w. RTCA-DO160 and ABD0100	
WLC2407 Bracket [*brackets add 2 mm to the width and height]	

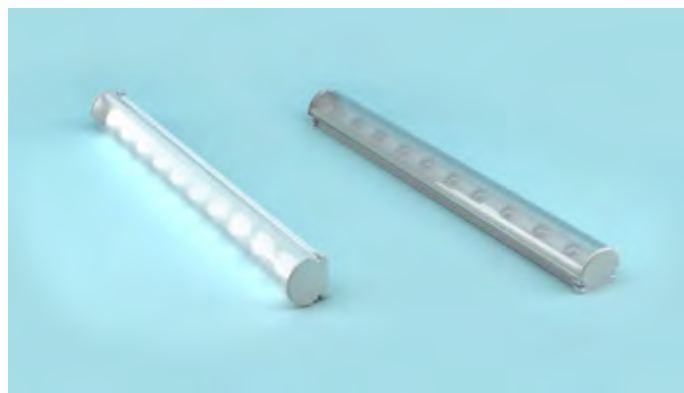




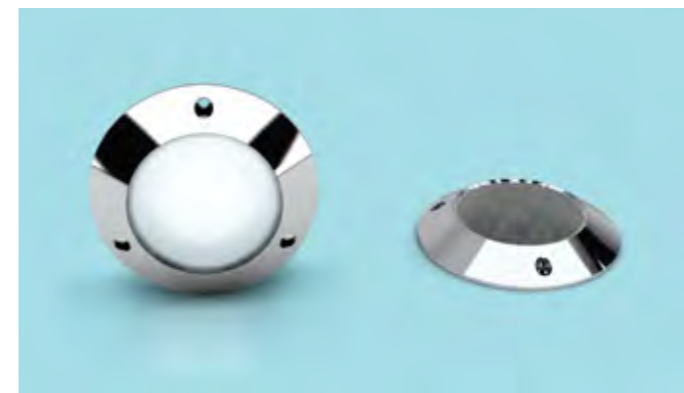
LWL1008	LED Ceiling Light
designed for various types of aircraft	
+ colour	white - approx. 3000, 3500 or 4000 Kelvin
+ voltage	28 V DC
+ consumption	ca. 25 W per meter
+ dimensions	ca. 80 – 2000 x 18 x 9 mm (l/w/h – lenght in steps of 25,4 mm)
+ weight	ca. 430g per meter
+ fully qualified i.a.w. RTCA-DO160	
WLC2407 Bracket [*brackets add 2 mm to the width and height]	



LD0510	LED Work Light
designed for various types of Airbus and Boing aircraft	
+ colour	white - approx. 4700 or 8000 Kelvin
+ voltage	28 V DC or 115 V AC / VF 360-800 Hz
+ consumption	max. 6 W
+ dimensions	282 x 42 x 15/45 mm (l/w/h)
+ weight	max. 185 g
+ fully qualified i.a.w. RTCA-DO160	
lens options available: prism, facet, diffuse and clear	
lamp covers available in various colours/finishes	



LWL2407	LED Ceiling Light
designed for various types of aircraft	
+ colour	white - approx. 3000, 3500 or 4000 Kelvin
+ voltage	28 V DC
+ consumption	ca. 25 W per meter
+ dimensions	ca. 80 – 2000 x 18 x 9 mm (l/w/h – lenght in steps of 25,4 mm)
+ weight	ca. 430g per meter
+ fully qualified i.a.w. RTCA-DO160	
WLC2407 Bracket [*brackets add 2 mm to the width and height]	



LD0100	LED Spotlight
designed for various types of Airbus aircraft	
+ colour	white - approx. 4700 or 8000 Kelvin
+ voltage	28 V DC or 115 V AC / VF 360-800 Hz
+ consumption	max. 2.8 W
+ dimensions	26 mm (15 mm inst. depth) x 75 mm Ø
+ weight	59 g (lens and cover included)
+ fully qualified i.a.w. RTCA-DO160	
lens options available: facet or diffuse	

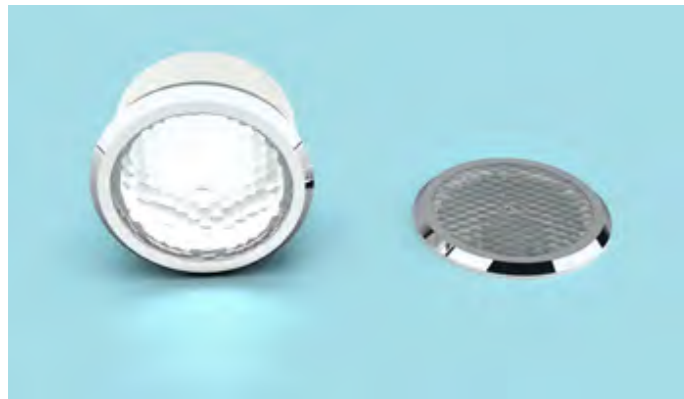



LD0500	LED Work Light
designed for various types of aircraft	
+ colour	white - approx. 4700 or 8000 Kelvin
+ voltage	28 V DC or 115 V AC / VF 360-800 Hz
+ consumption	max. 6 W
+ dimensions	282 x 42 x 23/53 mm (l/w/h)
+ weight	max. 185 g
+ fully qualified i.a.w. RTCA-DO160	
lens options available: prism, facet or diffuse	




LD0110	LED Spotlight
designed for various types of Airbus aircraft	
+ colour	white - approx. 2700 K, 4000 K or 6500 K
+ voltage	28 V DC or 115 V AC / VF 360-800 Hz
+ consumption	max. 2.8 W / 3 VA
+ dimensions	15 x 75 mm Ø (10 mm inst. depth)
+ weight	69 g
+ fully qualified i.a.w. RTCA-DO160	
LC0111 Lamp Cover- available in various colours or metal coatings	






LE0122	LED Spotlight	
designed for various types of aircraft		
+ colour	white - 4000, 5000, 6000 or 8000 Kelvin	
+ voltage	28 V DCC	
+ consumption	max. 4.2 W	
+ dimensions	41 x 61 mm Ø [46 mm inst. depth]	
+ weight	85 g (housing and cover excluded)	
+ fully qualified i.a.w. RTCA-D0160		
LH0127 Ultem® Housing LC0128/29 Covers Covers lens: diffuse		




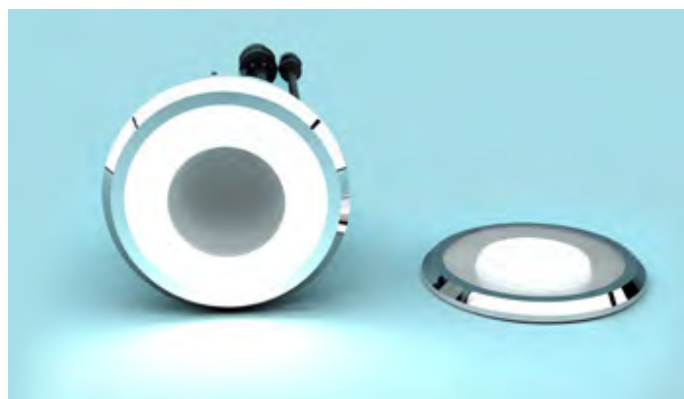
LFL9004	Low Floor Light	
designed for various types of Airbus aircraft		
+ specially designed to highlight bars, stairs and art etc.		
+ colour	white - approx. 4.700 and 8.000 Kelvin	
+ voltage	28 V DC	
+ consumption	14 W per meter	
+ dimensions	500 - 5.000 x 10 mm Ø bending radius max. 200 mm	
+ weight	100 g per meter	



LE0125	LED RGB Spotlight	
designed for various types of aircraft		
+ colour	RGB - 16.7 million light colours (24 bit)	
+ voltage	28 V DCC	
+ consumption	max. 5 W without interface cable max. 6.5 W with VB0130-00	
+ dimensions	41 x 61 mm Ø [46 mm inst. depth]	
+ weight	85 g (housing and cover excluded)	
+ fully qualified i.a.w. RTCA-D0160		
LH0127 Ultem® Housing LC0128/29 Covers lens: diffuse		



ML0970	Lavatory Mirror w. Integrated Light	
designed for the Airbus A350		
+ colour	approx. 4000 K	
+ voltage	28 V DC	
+ current	max. 0.25 A	
+ dimensions	30 mm x 171 mm Ø	
+ weight	300 g	
+ extra info	magnification factor 3	



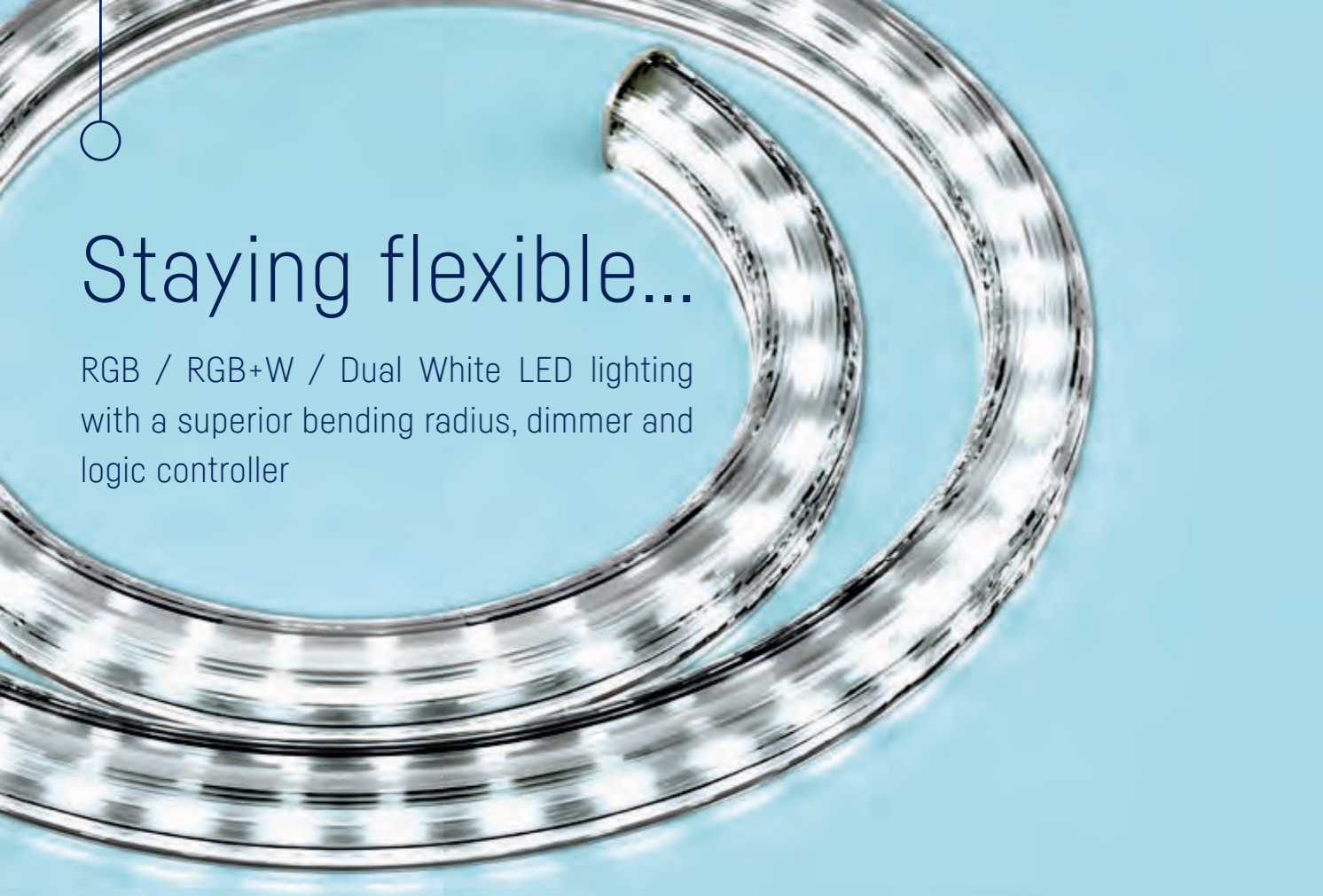
LE0126	LED RGB (+W) Spot & Emergency Light	
designed for various types of aircraft		
+ colour	spotlight: single/dual white LED cluster opt. RGB, RGB+W + 16.7 million light colours (24 bit) emergency light: single white, optional single colour LEDs in R/G/B	
+ voltage	spotlight: 28 V DC emergency light: 6 V DC / 28 V DC	
+ consumption	spotlight: max. 5.5 W emergency light: max. 1.6 W / 1.5 W	
+ dimensions	35 mm (inst. depth) x 56 mm Ø	
+ weight	120 g (175 g housing and cover included)	

LH0127 Ultem® Housing | LC0128/29 Covers Covers | lens: center - half clear (spotlight), outer ring - diffuse (emergency light)



Staying flexible...

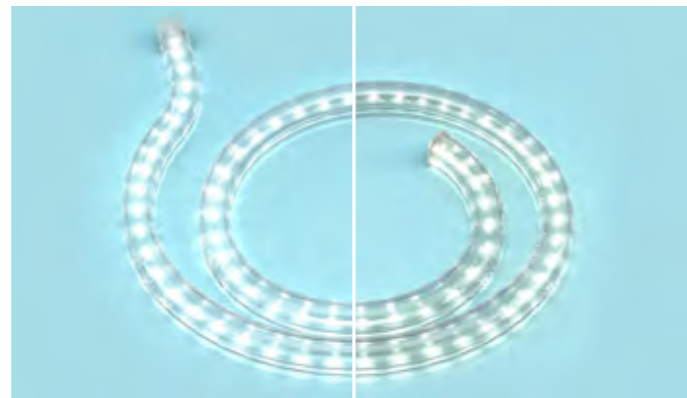
RGB / RGB+W / Dual White LED lighting with a superior bending radius, dimmer and logic controller



FL0230 Flexible RGB Decor Light 

designed for the Airbus A350	
+ colour	RGB - 16.7 million light colours (24 bit)
+ voltage	28 V DC
+ consumption	max. 10 W per meter
+ dimensions	180 base unit x 18 x 15 mm + 120 mm per ext. up to 4980 mm (l/w/h)
+ weight	base 75 g + 25 g per extension

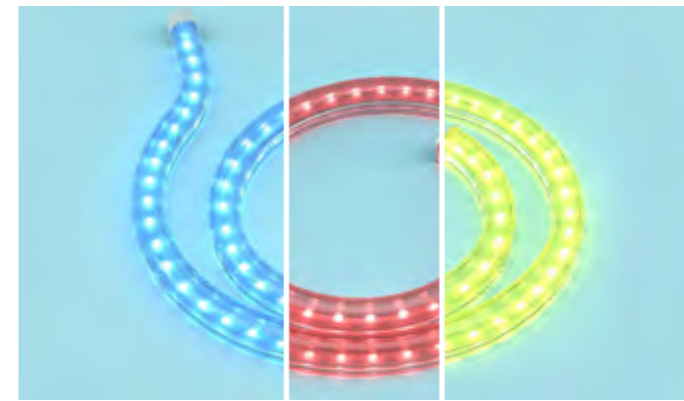
BR0241- brackets add 2 mm to the width and height



FL0235 Flexible Dual White Decor Light 

designed for the Airbus A350	
+ colour	Dual White - adjustable from 6500 K to 2700 K
+ voltage	28 V DC
+ consumption	max. 10 W per meter
+ dimensions	180 base unit x 18 x 15 mm + 120 mm per ext. up to 4980 mm (l/w/h)
+ weight	base 75 g + 25 g per extension

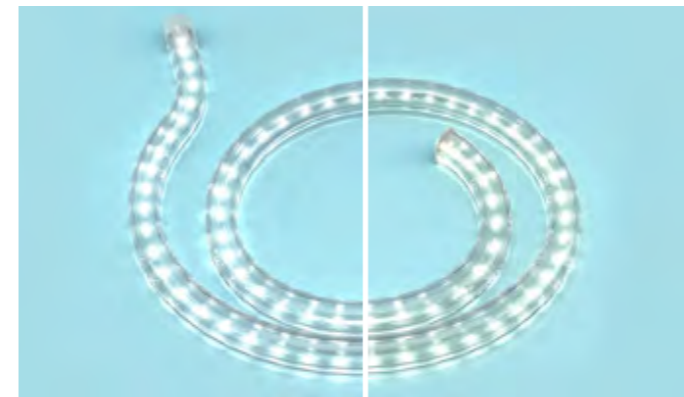
BR0241- brackets add 2 mm to the width and height



FL0240 Flexible RGB Decor Light 

designed for various types of Airbus aircraft	
+ colour	RGB - 16.7 million light colours (24 bit)
+ voltage	28 V DC
+ consumption	max. 10 W per meter
+ dimensions	180 base unit x 18 x 15 mm + 120 mm per ext. up to 4980 mm (l/w/h)
+ weight	base 75 g + 25 g per extension

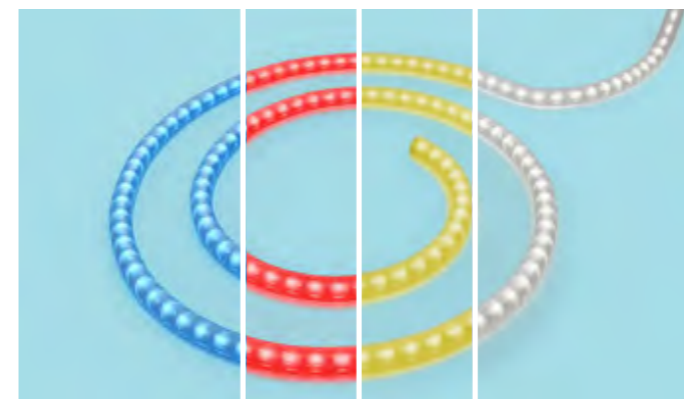
BR0241 Bracket
[*brackets add 2 mm to the width and height]



FL0245 Flexible Dual White Decor Light 

designed for various types of Airbus aircraft	
+ colour	white - adjustable from 6500 K to 2700 K
+ voltage	28 V DC
+ consumption	max. 10 W per meter
+ dimensions	180 base unit x 18 x 15 mm + 120 mm per ext. up to 4980 mm (l/w/h)
+ weight	base 75 g + 25 g per extension

BR0241 Bracket
[*brackets add 2 mm to the width and height]

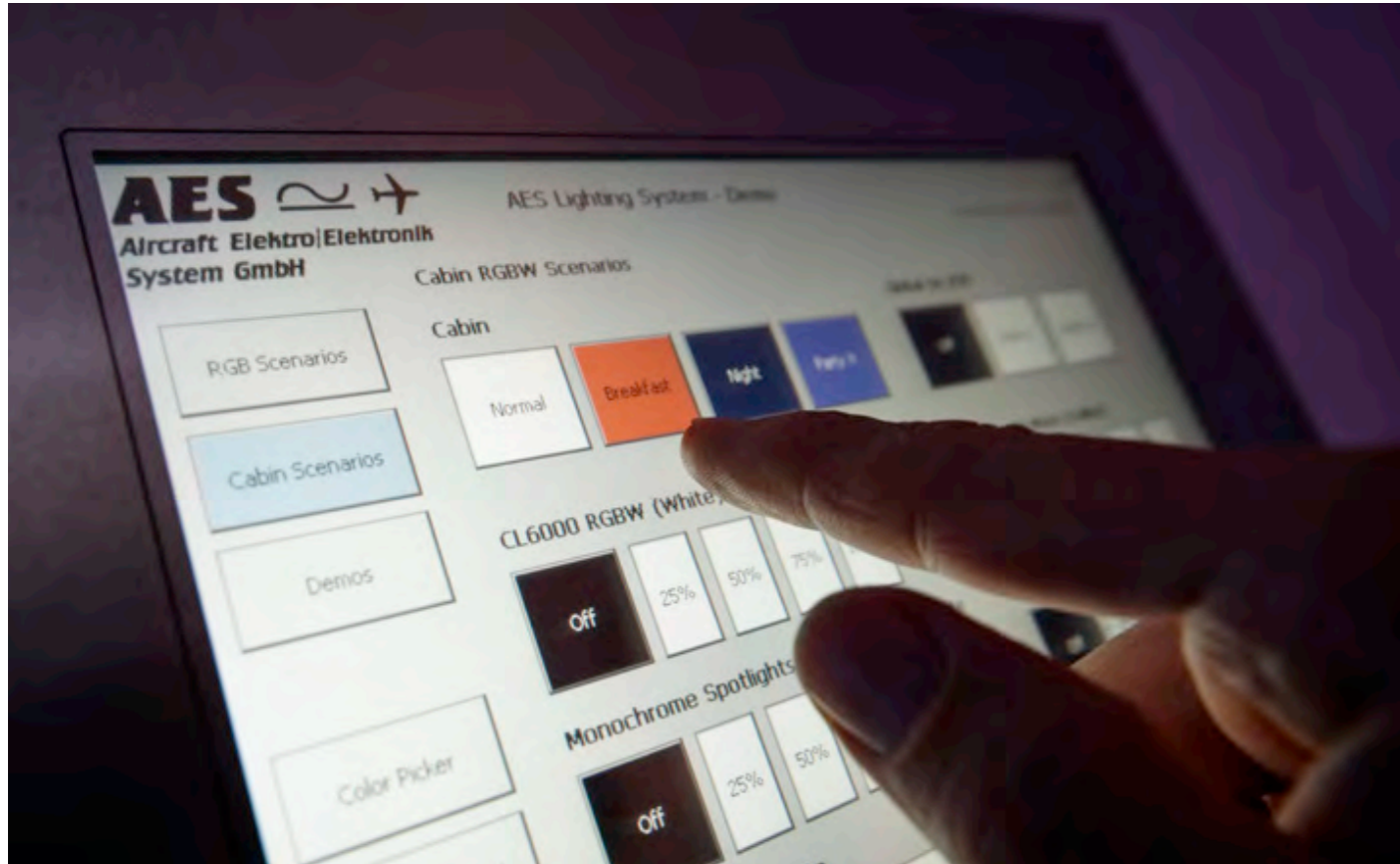
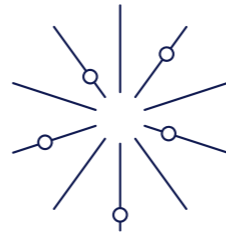


FL0250 Flexible RGB+W Decor Light 

designed for various types of Airbus aircraft	
+ colour	RGB+W: up to 16.7 million light colours (24 bit)
+ voltage	28 V DC
+ consumption	max. 10 W per meter
+ dimensions	132 base unit x 12 x 16.4 mm + 112 mm per ext. up to 5060 mm (l/w/h)
+ weight	base 107 g + 112g per extension

BR0251 Bracket
[*brackets add 2 mm to the width and height]

Taking control...



Luminance, colour, temperature, humidity, volume... We give you the control!

Over the past 25 years AES has developed several products, some controlled per microcontroller and others using programmable logic (e.g. FPGA). We employ these products in a broad range of applications. The move to digitally controlled products began with the RGB spotlight for colour lighting applications. The spotlight features a 32-bit microcontroller, which regulates and monitors light output while software compensates for colour deviations caused by operating temperature and ageing. AES developed and documented the embedded software in accordance with the RTCA DO-178B standard (Software Considerations in Airborne Systems and Equipment Certification). A major show-piece within the AES lighting systems is our configurable RGBW Light Controller, developed and approved for various types of aircraft. We tailor the light controller functions to meet customer requirements, using application specific software and parameter configurations. This flexibility makes the light controller a ver-

satile control device for AES LED lighting products. One of our earlier customer projects involved the hardware and software design and development of a complex component for an in-flight entertainment (IFE) system. This included the integration of a commercial Gigabit Ethernet switch module. The next generation of this component will feature optical 10 Gigabit Ethernet ports to support high-bandwidth IFE backbone connections. In another project, AES designed and developed a custom water control system for a VIP aircraft. The system consisted of a main controller unit and touch screen computer serving as an interface to communicate over a serial data bus. Rather than software, programmable logic drives the core functions of the main controller. This allowed it to meet all the requirements, e.g. controlling many valves simultaneously. Other existing and future projects address the areas of power management and digitally controlled power supplies.



BIU0045 Bus Interface Unit	
designed for various types of aircraft	
+ voltage	28 V DCC
+ consumption	max. 112 W
+ dimensions	215 x 172 x 44 mm (l/w/h)
+ weight	1.2 kg
+ fully qualified i.a.w. RTCA-DO160	

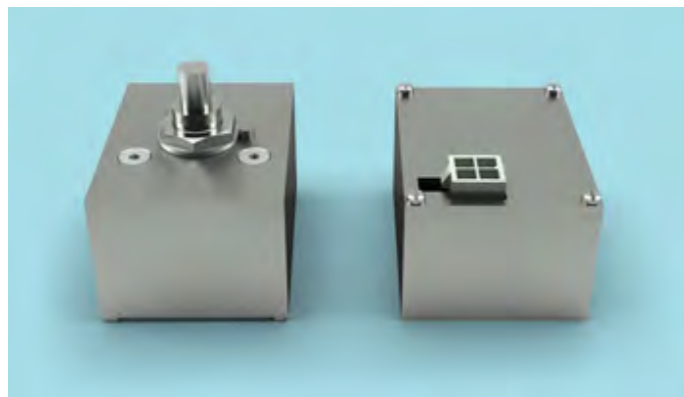


DD0290 PWM Dimmer	
designed for various types of Airbus aircraft	
+ dimensions	133 x 125 x 39.5 mm (+ 17.5 mm ground bolt) (l/w/h)
+ in voltage	28 V AC for PNR DD0290-000 115 V AC for PNR DD0290-100 / VF 360-800 Hz
+ in current	max. 2.2 A @ 28 V AC 0.45 A @ 115 V AC
+ out voltage	28 V PWM (pulse wide modulated)
+ out current	max. 1.1 A
+ weight	700 g



DD0295 PWM Dimmer	
designed for various types of Airbus aircraft	
+ dimensions	80 x 115 x 39.5 mm (+ 15 mm ground bolt) (l/w/h)
+ in voltage	28 V DC
+ in current	max. 1.2 A
+ out voltage	28 V PWM (pulse wide modulated)
+ out current	max. 1.1 A
+ weight	200 g





DP0299 Control Potentiometer	
designed & approved for all Airbus aircraft	
+ dimensions	63 x 49 x 26.2 mm (l/w/h)
+ voltage	max. 38 V DC
+ current	max. 3.8 mA
+ consumption	max. 0.15 W
+ weight	75 g* 80 g**
+ options available:	DP0299-000 - 1 x 10 kΩ, log* DP0299-001 - 1 x 10 kΩ, lin* DP0299-002 - 2 x 10 kΩ, lin**



MU0235 Memory Unit for light controllers included



LC0300-02 4 Channel Light Control System	
designed & approved for for various types of Airbus air	
+ dimensions	209 x 121 x 60 mm (l/w/h)
+ voltage	in: 115 V AC VF 360 - 800 Hz out: 4 x 28 V PWM (pulse wide modulated)
+ current	in: approx. 1.45 A
+ power	out: 140 W
+ connector	ABS1019 [D-Sub-9 PIN] or ABS1145 [D-Sub-50 PIN]
+ weight	1.42 kg



MU0235 Memory Unit for light controller included



LC0300-00 4 Channel Light Control System	
designed & approved for for various types of Airbus aircraft	
+ dimensions	209 x 151 x 40 mm (l/w/h)
+ voltage	in: 115 V AC VF 360 - 800 Hz out: 4x 28 V PWM (pulse wide modulated)
+ current	in: approx. 0.3 A
+ power	out: 30 W
+ connector	ABS1019 [D-Sub-9 PIN] or ABS1145 [D-Sub-50 PIN]
+ weight	620 g



MU0325 Memory Unit for light controllers included



LC0320 8 Channel Light Control System	
designed for various types of Airbus aircraft	
+ dimensions	209 x 115 x 40 mm (l/w/h)
+ voltage	in: 28 V DC out: 8 x 28 V PWM (pulse width modulated)
+ current	in: max. 5.1 A out: max. 5 A
+ connector	ABS1145 [D-Sub-9 PIN] or ABS1145 [D-Sub-50 PIN]
+ weight	470 g [+20 g memory unit]



MU0235 Memory Unit for light controller included



LC0300-01 4 Channel Light Control System	
designed & approved for for various types of Airbus aircraft	
+ dimensions	209 x 151 x 40 mm (l/w/h)
+ voltage	in: 28 V DC out: 4 x 28 V PWM (pulse wide modulated)
+ current	in: approx. 5 A
+ power	output 140 W
+ connector	ABS1145 [D-Sub-9 PIN] or ABS1145 [D-Sub-50 PIN]
+ weight	470 g



LPU1009 LED Power and Control Unit	
designed for all types of aircraft	
+ dimensions	220 x 170 x 50.6 mm (l/w/h) (236 mm connectors included)
+ voltage	in: 115 V AC / VF 360 - 800 Hz out: 28 V DC
+ current	in: 4.3 A out: 28 V DC
+ power	max. 400 W
+ connector	MS24308-4-3 [D-Sub-25P PIN]
+ weight	1.5 kg





CU8420 Multi-Purpose Control Unit



designed for various types of aircraft

- + dimensions 145 x 204 x 35 mm (l/w/h)
- + voltage 2 x 28 VDC power outputs
- + weight 950g
- + features multi-purpose control unit with a modular design for maximum flexibility. The CU8420 can employ numerous modules with special functions. This is determined by the performance demand and number of interfaces required.



TP0312 Cabin Control Touch Panel

designed for various types of aircraft

- + dimensions 288 x 236 x 73.2 mm (l/w/h)
- + voltage 28 VDC
- + weight 2300g
- + features call display and call management
general lighting
switches and control
white and RGB lighting control
optional: integration of custom-made features



FS0945-00 manual

FS0945-10 touchless

FS0945 Lavatory Flush Switch, manual and touchless

designed for all Airbus aircraft

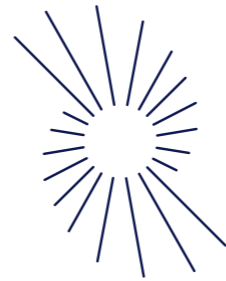
- + colour/wave blue=470 nm | amber=590 nm | white=6000 K
- + dimensions front: 86 x 86 x 33.5 mm (l/w/h) | back: Ø 84 mm
- + voltage 28 V DC
- + current max. 6 W idle per meterax. 8 W active
- + weight 320 g (foil and cover included)

FF0946 Flush Switch Foil: can be custom-made for any airline design
FC0947 Flush Switch Cover: available in several colours and finishes

AES

Visit us on www.aes-aero.com
We create solutions.

Powering your systems...

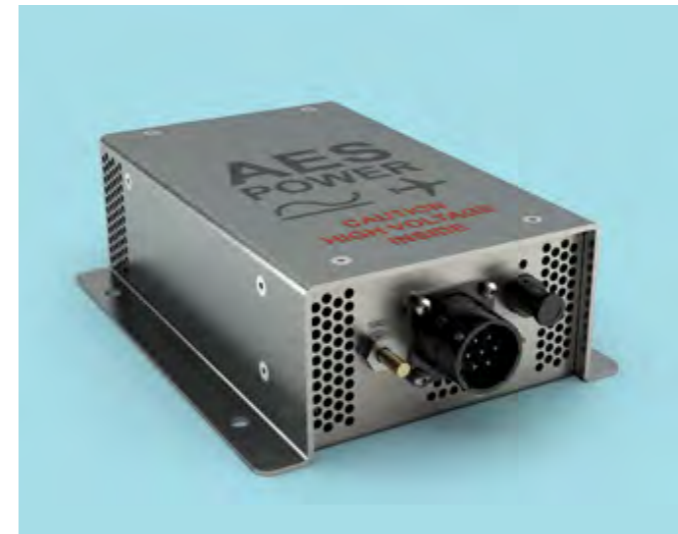


Power, current, charge, voltage, resistance, potential... Making an aircraft fly means providing one, while keeping an eye on the others. We give you the power to do this!

Designing and developing power supplies is just one of our main skills. We benefit from over 25 years of experience in this field.

The first series of our classic power supply products are transformer rectifiers. They are approved for the AIRBUS single-aisle (A318, A319, A320 and A321) and long-range (A330 and A340) aircraft as well as for the Boeing B777. Three different models of the transformer rectifiers supply 140 W, 280 W, and 420 W at 28 V DC. Our second generation power supply products are switch mode power supplies. They are approved for various types of Airbus aircraft, respectively. They function with variable, in addition to, constant frequencies. These are far lighter and more efficient than the classic transformer rectifiers.

Furthermore, they automatically shut down in the event of overheating and restart only when reset. We use the modern technology of resonance transformers for our newest generation of switch-mode power supplies, "Cool & Green Power". This highly efficient product ensures only minor dissipation losses, which preserves low temperatures. As a result, the "Cool & Green Power" source does not require an internal fan. The first version of the "Cool & Green Power" generation supplies 70 W at 28 V DC with more than 90% efficiency. It is approved for the AIRBUS A318, A319, A320, A321, A330, A340, A350, and A380 aircraft. Our current research and development projects are focused on digitally controlled power supplies.



PS1140 Switch Mode Power Supply		QR Code
designed for various types of Airbus aircraft		
+ dimensions	179 x 130 x 54.5 mm (l/w/h)	
+ voltage	in: 96 - 130 V AC / VF 360 - 800 Hz out: 28 V PWM (pulse wide modulated)	
+ current	in: approx. 1.45 A	
+ power	output 140 W	
+ connector	MS24264R14B7PN or EN3646A01412AN	
+ weight	1.4 kg	



PS2030 Switch Mode Power Supply		QR Code
designed for various types of Airbus aircraft		
+ dimensions	253 x 46 x 43 mm (l/w/h)	
+ voltage	in: 115 V AC / VF 360 - 800 Hz out: 28 V DC	
+ current	in: nom. 0.3 A out: 1.1 A	
+ power	output 30 W	
+ connector	EN3646A01412AN	
+ weight	500 g	



PS2070 Switch Mode Power Supply		QR Code
designed for various types of Airbus aircraft		
+ dimensions	150 x 130 x 42 mm (l/w/h)	
+ voltage	in: 115 V AC / VF 360 - 800 Hz out: 28 V DC	
+ current	in: nom. 0.7 A out: 2.5 A	
+ power	output 70 W	
+ connector	MS24264R14B7PN or EN3646A01412AN	
+ weight	600 g	



PS2500 Switch Mode Power Supply	
	designed for various types of Airbus aircraft
+ dimensions	235 x 170 x 50 mm (l/w/h)
+ voltage	in: 96 - 130 V AC / VF 360 - 800 Hz out: 28 V DC
+ current	in: nom. 4 A out: max. 15 A
+ power	output 420 W
+ weight	600 g



TR0280 Transformer Rectifier	
	designed for various types of Airbus and Boeing aircraft
+ dimensions	247 x 189 x 68 mm (l/w/h)
+ voltage	in: 115 V AC / 400 Hz single phase out: 28 V DC nom. [26 V DC at 10 A]
+ current	in: max 3.65 A out: max. 10 A
+ weight	2.9 kg



PS6120 3-Phase Switch Mode Power Supply	
	designed for various types of Airbus aircraft
+ dimensions	235 x 170 x 50 mm (l/w/h)
+ voltage	in: 115 V AC / VF 360 - 800 Hz 3 phase out: 28 V DC
+ current	in: 4.2 A per phase out: 42 A
+ power	output 1200 W
+ weight	4 kg



TR0420 Transformer Rectifier	
	designed for various types of Airbus and Boeing aircraft
+ dimensions	247 x 209 x 75 mm (l/w/h)
+ voltage	in: 115 V AC / 400 Hz single phase out: 28 V DC nom. [26 V DC at 15 A]
+ current	in: max. 5.35 A out: max. 15 A
+ weight	3.4 kg



TR0140 Transformer Rectifier	
	designed for various types of Airbus and Boeing aircraft
+ dimensions	180 x 130 x 55 mm (l/w/h)
+ voltage	in: 115 V AC / 400 Hz single phase out: 28 V DC nom. [26 V DC at 5 A]
+ current	in: max 1.8 A out: max. 5 A
+ weight	1.64 kg



More than just managing...

Our highly efficient Galley Power Management System is a power source, digitally controlled fuse box, light controller, and management tool – all in one!



PM8350	Galley Power Management System (2MH)
designed for the Airbus 350 - viable for other aircraft models	
+ colour	alu elox finish alu dark finish
+ dimensions	565 x 125 x 312 mm (l/w/h)
+ voltage	in: 96 - 130 V AC, 3-phase, 360 - 800 Hz out: 115 AC, 3-phase, 360 - 800 hz
+ current	2 AC feeder [6 x 43.5 A each phase]
+ total current	6 x 43 A
+ consumption	max. 10 W per meter
+ weight	13 kg

FR8500	Modular Frames for Power Manager
designed for the Airbus A350	
+ colour	alu elox finish alu dark finish
+ dimensions	1MH: 502.6 x 312 x 50 mm [connectors included] [l/w/h] 2MH: 502.6 x 312 x 125 mm [connectors included] 3MH: 502.6 x 312 x 205 mm [connectors included]
+ weight	1MH: ~ 1.6 kg 2MH: ~ 2.6 kg 3MH: ~ 3.95 kg



SP8100	Switch Panel for PM8350
designed for the PM8350 Galley Power Management System	
+ dimensions	310 x 34 x 48 mm (l/w/h)
+ voltage	supplied by PM8350
+ consumption	provided by PM8350
+ weight	420 g (switches included)
custom-made and vertical options are also available	

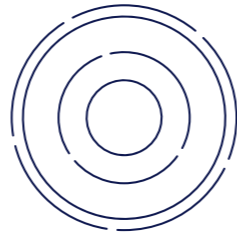


PM8010	Power Manager Module
designed for the PM8350 Galley Power Management System	
+ dimensions	483 x 306 x 46.5 mm (l/w/h)
+ voltage	in: 90-130 V AC / VF 360 - 800 Hz 3 phase out: 115 V AC / VF 360 - 800 Hz 3 phase out: 28 V DC switched - 7 channels
+ current	in: 2 A/C feeder [6 x 43.5 A each phase] out: 6 x 43.5 A
+ consumption	50 A / 48 A
+ weight	5.1 kg



CM8200	Configuration Data Storage Module
designed for the PM8350 Galley Power Management System	
+ dimensions	28 x 44 x 28 mm (l/w/h)
+ installation	internal
+ consumption	provided by PM8350
+ weight	14 g

Communicating with everyone and everything...




Smooth communication between the pilots, crew and aircraft, in addition to the passengers and systems must be operational at all times. Our communication products help you do just that!

We have consistently met the rapidly changing technical demands of the aviation industry since the early 1990. At the same time, we have continued to meet our VIP, governmental and corporate customers' requirements.


AES' products are used in various aircraft models including the Airbus single-aisle (A318-A321) aircraft, the long-range and wide-bodied Airbus A330 and A340, as well as, the Boeing Business Jet (BBJ) 737-200 to 800, and the Boeing 777, 747-200, 400 and 8 aircraft. Today, AES' cabin network products include an Ethernet switch unit, a corded VoIP telephone, a

touch controlled display panel and a multi-purpose control unit. Our Ethernet switch unit connects components via LAN allowing for a faster connection with easier access between the components. Our newly developed multi-purpose core unit can be used as a cabin controller, cabin management system or entertainment bridge interface. It is software controlled with numerous exchangeable modules. The number of modules in use is determined by the performance demand and number of interfaces required. The system can be navigated via our PCAP touch display.



THX2015	Corded VoIP Telephone	
designed for AES' communication system		
+ colour	anthracite	
+ voltage	28 V DC 5 W	
+ dimensions	181 x 68 x 66 mm (l/w/h)	
+ modes	SIP - compatibility mode for 3rd party equipment	
+ weight	900 g (handset, flex cord & cradle)	
flex cord is included		



ESU2412	Ethernet Switch Unit	
designed for all types of aircraft		
+ voltage	115 V AC / 400 Hz	
+ current	600 mA	
+ consumption	< 60 W	
+ dimensions	220 x 317 x 83.5 mm (l/w/h)	
+ modes	SIP- compatibility mode for 3rd party equipment	
+ weight	2.1 kg	

Going the extra mile ...



Extraordinary solutions for exceptional aircraft - Meeting the requirements for our VIP clients with private and business jets has proven to be a unique and exciting challenge for our engineers. The emphasis of our work in this area is the design and development of custom aircraft cabins. We make it our goal to find the unique parts and systems for each of these aircraft cabins. Innovative solutions, meeting such high-quality standards demand flexibility, speed, and excellent customer relations. These points being the vital factors to our success. We listen closely, identifying individual needs, thinking ahead for you systematically.



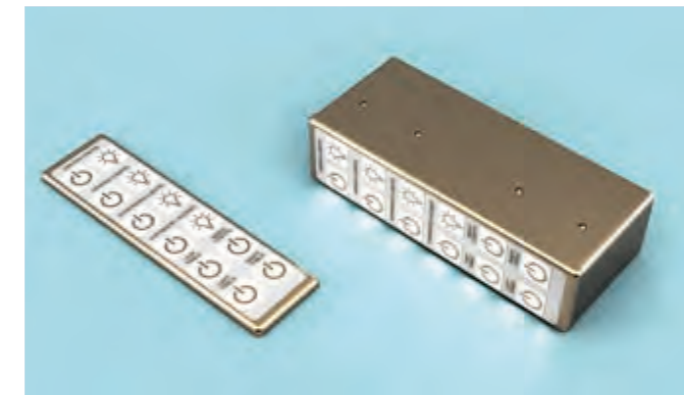
SD0900 OLED Sign Panel



sign with two OLED panels - flat design

- + colour 4000 / 3000 K
- + voltage 28 V DC
- + weight 130 g (without connector)
- + dimensions 78 x 192 x 10 mm (l/w/h)
7 mm installation depth

for installation e.g. in passenger seat arm rests. Multiple layout and finish options available

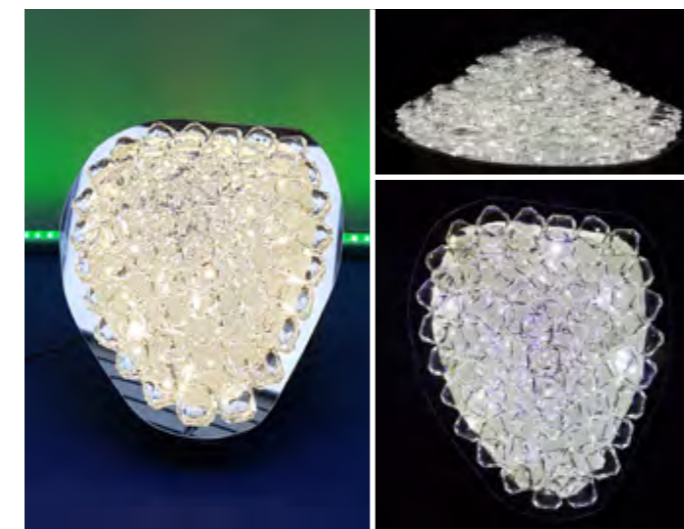


SCP2409/2709 Switch Control Panel

Individually designed switch control panel due to specific customer request. Applicable for various VIP jets and commercial aircraft - 2 sizes: SCP2409 - small | SCP2709 - large

- + colour/finish many options e.g. gold, chrome and brushed nickel
- + voltage 28 V DC
- + weight variable, depending on customer requirements
- + dimensions variable, up to 32 buttons possible,
min. 31.6 x 18 x 34 mm (l/w/h)

for installation e.g. in passenger seat arm rests. Multiple layout and finish options available



GL0980 Swarovski Crystal Lamp "Grape"



special design study

- + colour crystal clear & chrome mirror polish
- + voltage 28 V DC
- + consumption approx. 12 W (prototype)
- + weight 1.2 kg
- + dimensions front: 250 x 210 x 100 mm (l/w/h) | back: Ø 84 mm

the lamp is made from real Swarovski crystals, which are joined together using a special optical adhesive. It is surrounded by a polycarbonate mirror to intensify its sparkle. An aluminium support houses the light element and its electronics.

Approved and Certified



AES GmbH is an EASA (European Aviation Safety Agency) approved production organization (EASA Part 21G) and EASA approved maintenance organization (EASA Part 145). Our quality management system is certified according to EN 9100. The EASA Part 145 certification authorizes us to service our products. We build our products ourselves – As a result, we are able to offer genuinely seamless after sales support.

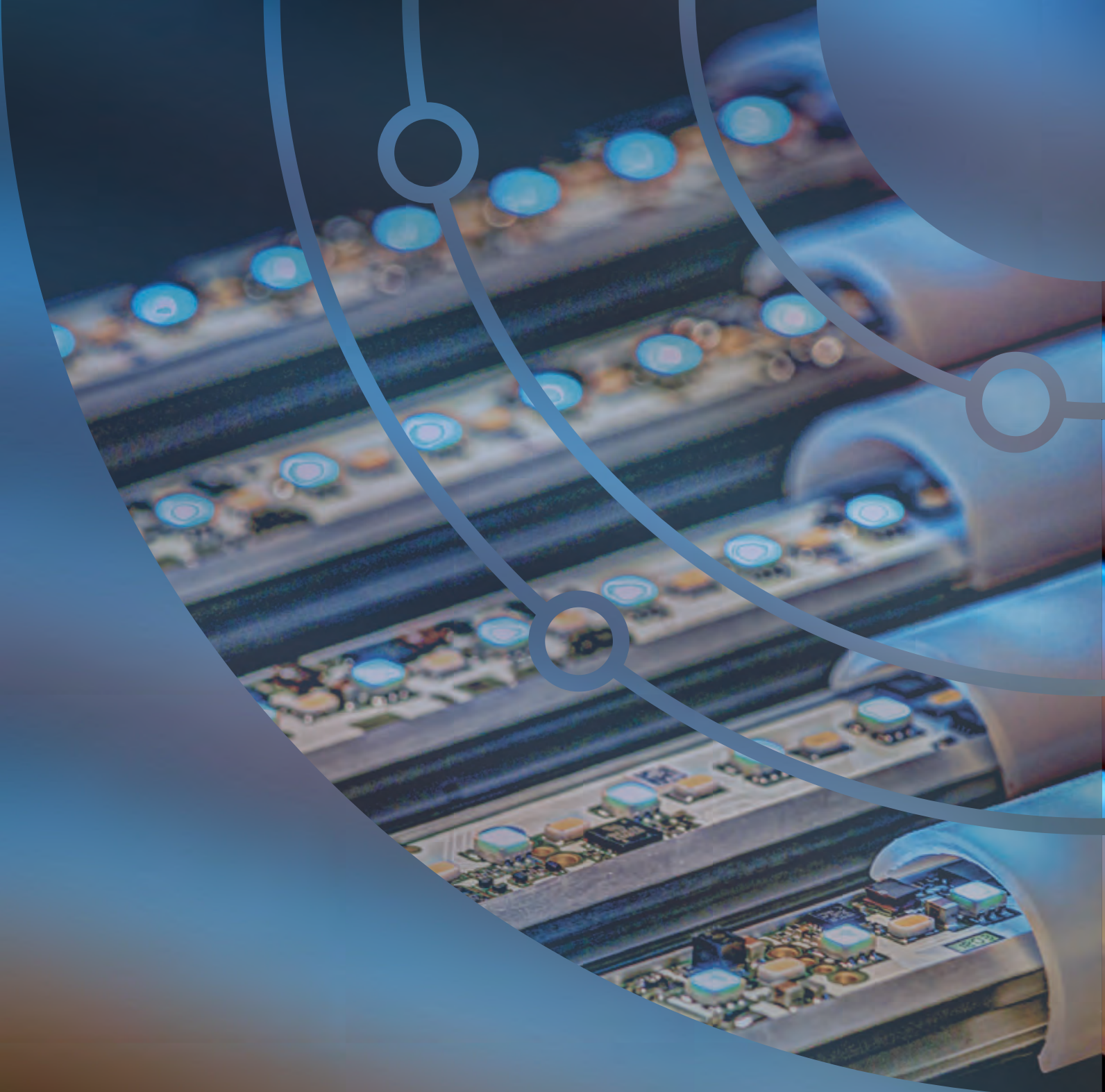
Continual improvement means down to the last, smallest detail, while meeting tough standards. Our philosophy is consistent quality and sustainability - quality over price. This distinguishes our company and solutions in the aviation industry - make it simple and do it right!

AES' reliable in-house production completes the final assembly of our equipment, components, and systems. Moreover, straightforward product maintenance helps prevent malfunctions and costly downtime. Our customers worldwide value the quality of our products. Our

Quality Management Department supervises and verifies implementation and compliance with all our processes. These processes are described in our Quality Management Manual, a most essential part of our quality management and assurance.

*»Quality is not an act,
it is a habit.«*

Aristotle



AES Aircraft Elektro/Elektronik System GmbH
Hanna-Kunath-Str. 33 | 28199 Bremen

T. +49 [421] 240 30 - 0
F. +49 [421] 240 30 - 77

www.aes-aero.com | info@aes-aero.com

