2024/25

Long-lasting

LED GROWLIGHTS

for Horticulture and Floriculture

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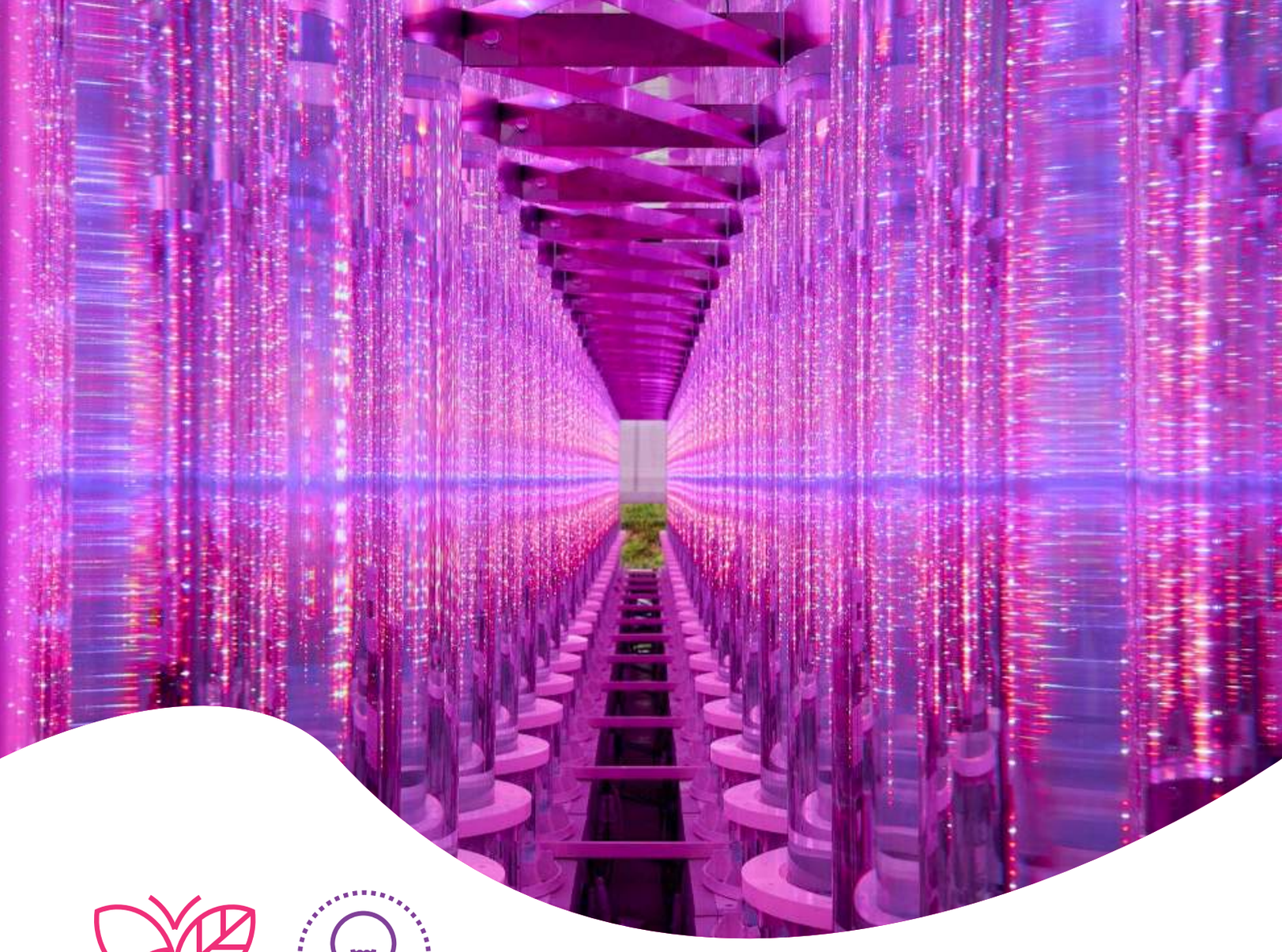

Light is essential for plants and has a major influence on their growth and well-being. Although the most powerful and economic source of light is the sun, natural sunlight is not always and not everywhere available. Sometimes it needs to be integrated or replaced by artificial light that mimicks it.

We are the specialists of LED lighting for plant professional growers and garden architects.

Passion, enthusiasm and dynamism have been our distinction since 2013, when we entered this market coming from a strong technical electronic background. Since then we established strong partnerships with Universities, Research Centers, landscape Architects and professional Growers.

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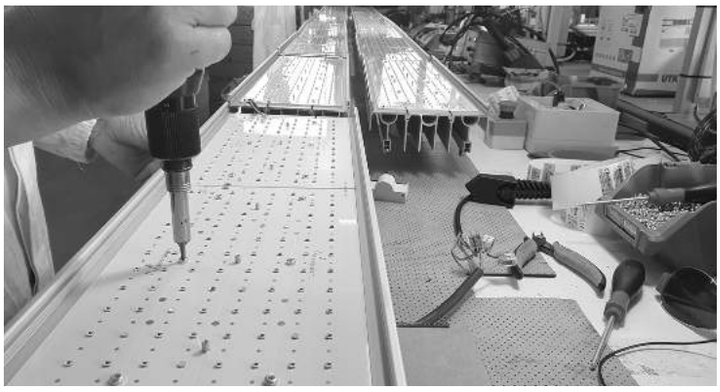
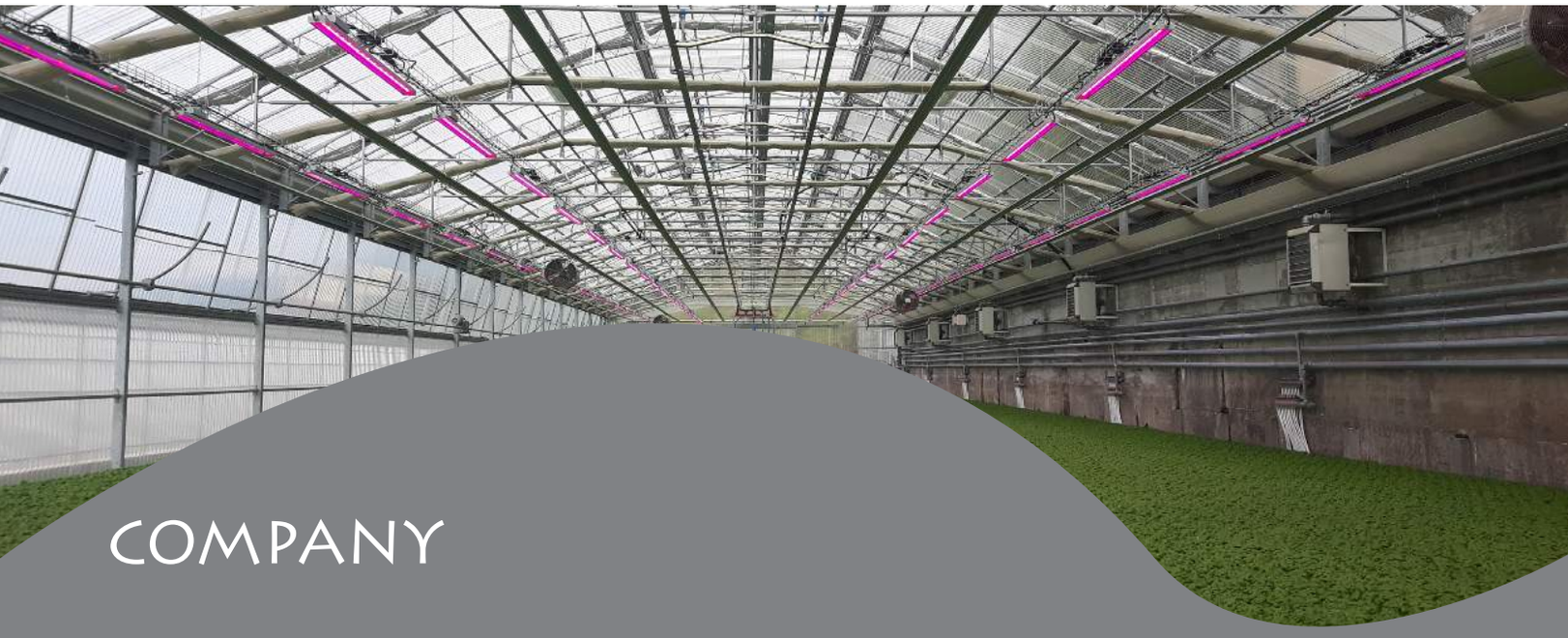
Certified Partner of OSRAM Semiconductors and certified according to UNI EN ISO 9001:2015 standards.

We start with the grower's requirements and the needs of the plants. We offer custom spectra installed in our LED lamps and lighting solutions designed for homogeneity of light: better micropropagation, growth and photosynthesis of plants.



APPLICATION FIELDS

Horticulture, nursery, vitro, vertical farms, growth chambers, greenhouses, floriculture, micropropagation, meristem, rooting, plant growth, flowering, legal cannabis, microgreens, micro algae, artospira platensis, spirulina algae, aquaponics, hydroponics, aeroponics, plant grafting, germination, photoperiodism, indoor green, green walls, vertical gardens.



COMPANY

ELETTRA

Supply Voltage	100 ÷ 305 Vac 50/60 Hz or 200 ÷ 480 Vac 50/60 Hz	Universal range Voltage Supply
Power supply	300 ÷ 330 W	
Photon flux PAR output	900 ÷ 1100 µmoles/s	Excellent flow of photons per second
PAR efficiency	3.00 ÷ 3.40 µmoles / J	
Working temperature	0 ÷ 45 °C	
Dimensions	690 x 180 x 130 mm	
Protection grade	IP65	High protection against water and dust
Weight	5,5 Kg	
Protections	Short circuit, over current, over voltage, over temperature	
Emitted light	Custom spectrum (designed on the client's specific needs)	Individual LEDs installed: 50+ light spectra available.
Dimmer	Optional	Analogic or digital, also regulated via APP
Expected decrease in light intensity	10% after 100.000 hours	

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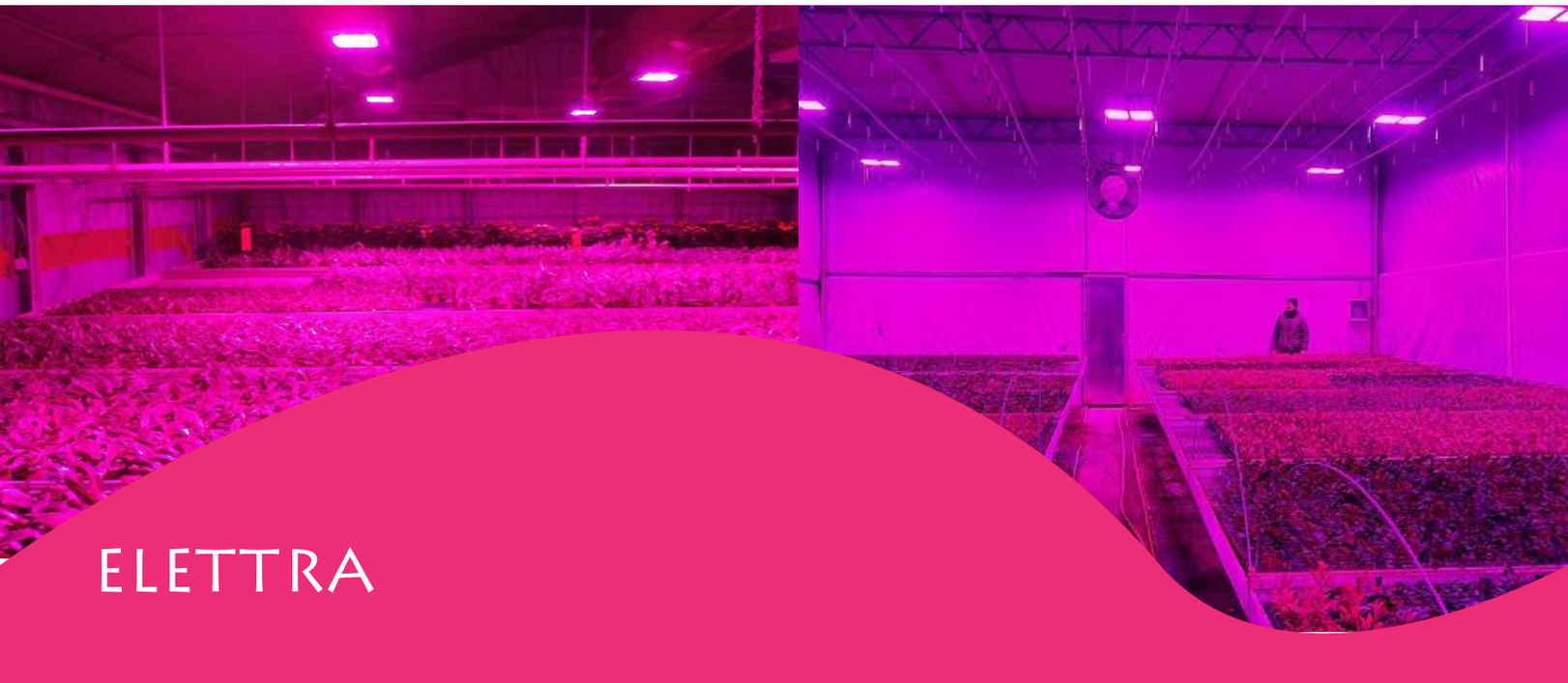
ELETTRA is our top selling product for professional horticulture, floriculture, nurseries and greenhouses. Assembled to withstand the harsh environment of modern production greenhouses and to sustain a long-term heavy-duty working cycle.

We designed ELETTRA combining our 13+ years of experience in growlights with a strict analysis of the lamp's body efficiency: more light, less heat with the same Watts.

Best materials => longer working life:
Osram LEDs, internally designed anodized aluminum heat sink, high transparency plexiglass XT, immune to UV rays (not yellow during lifetime), sealing system in EPDM die-cut foam, stainless steel external screws.
Tested also with infrared camera.



ELETTRA

AE 100

Supply Voltage	100 ÷ 305 Vac 50/60 Hz or 200 ÷ 480 Vac 50/60 Hz	Universal range Voltage Supply
Power consumption	100 ÷ 130 W	
Power Factor	PF>0.96/230VAC	The lamp ensures no loss of energy
Photon flux PAR output	300 ÷ 360 µmoles/s	Excellent flow of photons per second
PAR efficiency	3.0 ÷ 3.4 µmoles / J	Number of photons per second per Watt consumed
Working temperature	0 ÷ 45°C	
Dimensions	1508 x 73 x 33 mm	
Protection grade	IP65	High protection against water and dust
Weight	4,5 Kg @ L=1.5 m	
Protections	short circuit , over current, over voltage, over temperature	
Emitted light	Custom spectrum based onthespecific requirements	Individual LEDs installed: 50+ light spectra available.
Dimmer	Optional	Analogic or digital, also regulated via APP
Retain of light power over time	after 100.000 hours only 10% loss	Tested by OSRAM

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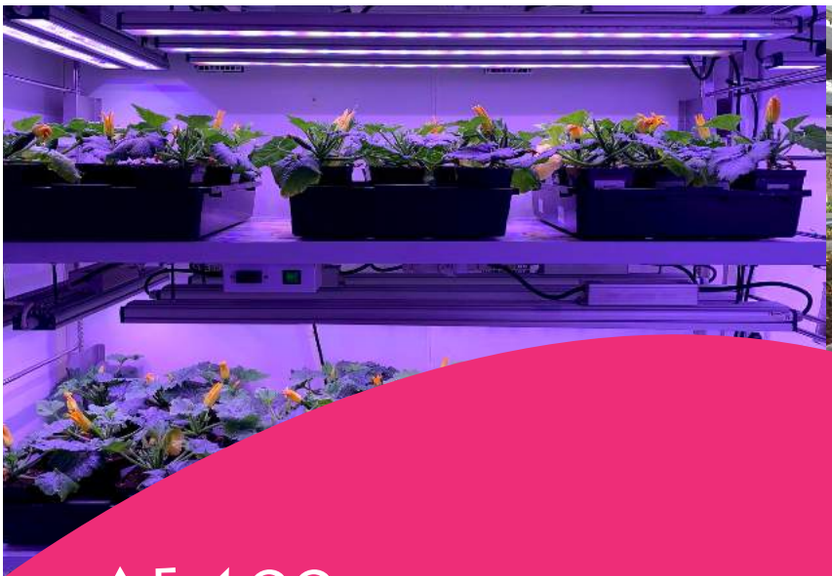
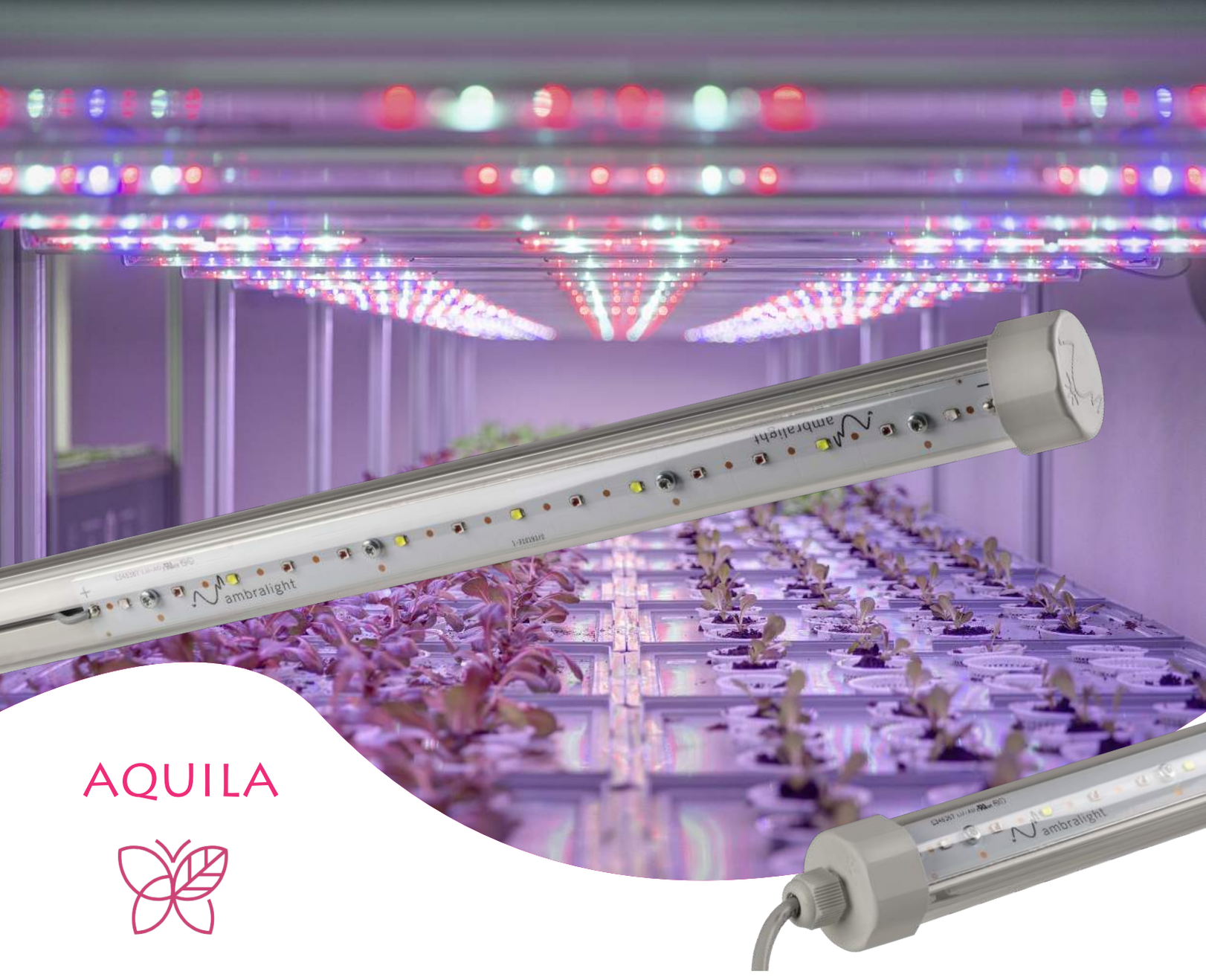
AE100 is fully designed and developed by Ambra Elettronica, entirely assembled in Italy with the highest-quality materials. Designed to be highly energy efficient: the light is emitted inside the visible light spectrum in the photosynthetically active region, this lamp enhances and optimizes the growth of plants.

AE100 has been specifically developed to be resistant to moisture, temperature fluctuations and dust. Up to 100,000 working hours at 90% of light intensity (tested by OSRAM)



AE 100



AQUILA

Supply Voltage	100 ÷ 305 Vac 50/60 Hz or 200 ÷ 480 Vac 50/60 Hz	Universal range Voltage Supply
Power consumption	20 ÷ 60 W	
Photon flux PAR output	80 ÷ 200 µmoles/s	Excellent flow of photons per second
PAR efficiency	3.0 ÷ 3.4 µmoles / J	Number of photons per second per Watt consumed
Working temperature	0 ÷ 45°C	
Dimensions	1000 ÷ 1500 x 32 x 32 mm	
Protection grade	IP65	High protection against water and dust
Weight	680 g @ L=1.2 m	
Protections	short circuit , over current, over voltage, over temperature	
Emitted light	Custom spectrum based on the specific requirements	Individual LEDs installed: 50+ light spectra available.
Dimmer	Optional	Analogic or digital, also regulated via APP
Retain of light power over time	after 100.000 hours only 10% loss	Tested by OSRAM

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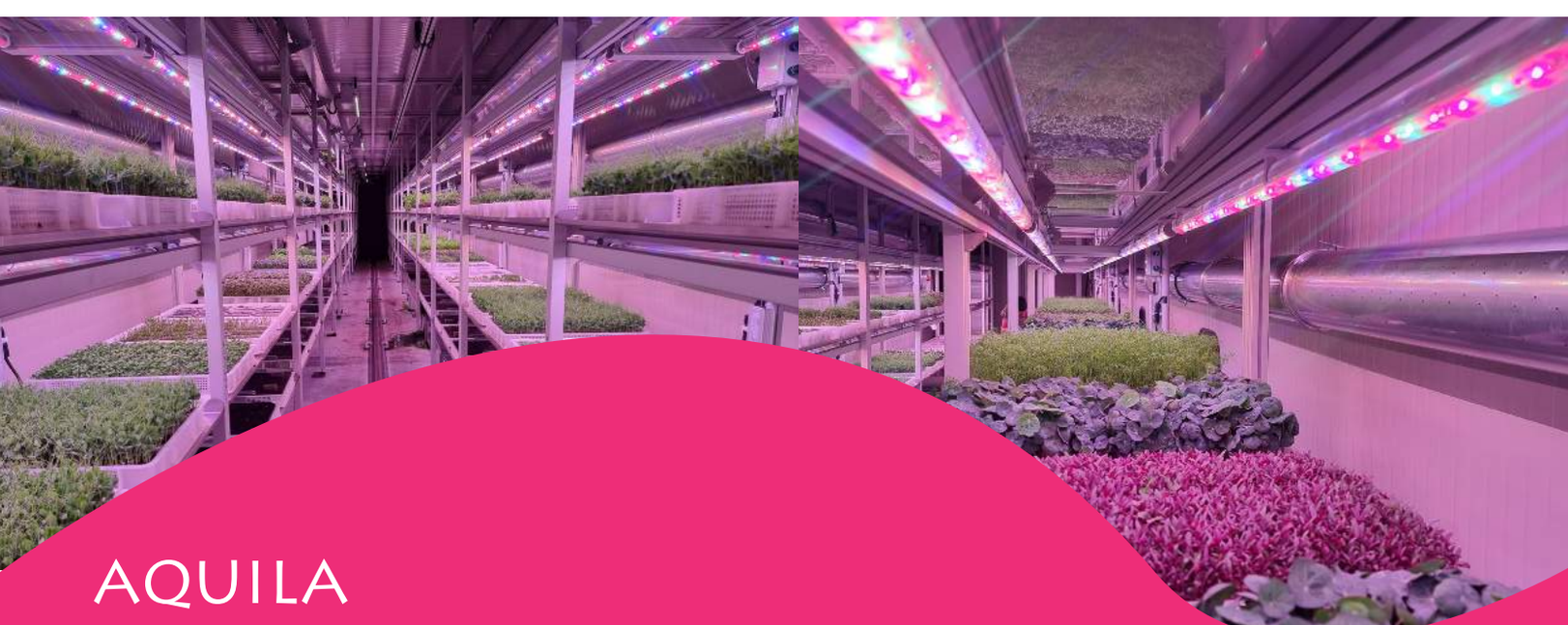
Aquila is the perfect lamp for indoor agriculture: vertical farms, growth chambers on shelves, micropropagation, meristem, rooting, plant growth, microgreens, plant grafting, germination. We select the correct spectrum depending on the goal you want to achieve. Intensity can be regulated also through a Dimmer.

The individual LEDs installed are produced by Osram Semiconductors, the global leader specialized in lighting technology for horticulture. Individual custom spectra are selected to cater to the needs of professional horticulture and floriculture growers.

Very dark and humid rooms (cellars, spas, corridors, underground spaces) can be transformed in surprisingly pleasant green areas. Little maintenance required.



AQUILA

ALTAIR

Supply Voltage	24 Vdc
Power supply	11 W/m
Power Factor	> 0,9
Lamp efficiency	150 lm / W
Emitted light	White 3000 ÷ 6500°K
Color rendering index CRI	>80
Light output angle	150°
Dimensions	Custom length x 18 x 8 mm
Weight	250 g/m
Temperature range	-20 ÷ +50 °C
Nominal life time	30.000 h
Energy efficiency class	A++
Power consumption	11 KWh / 1000 h
Protection grade	IP67

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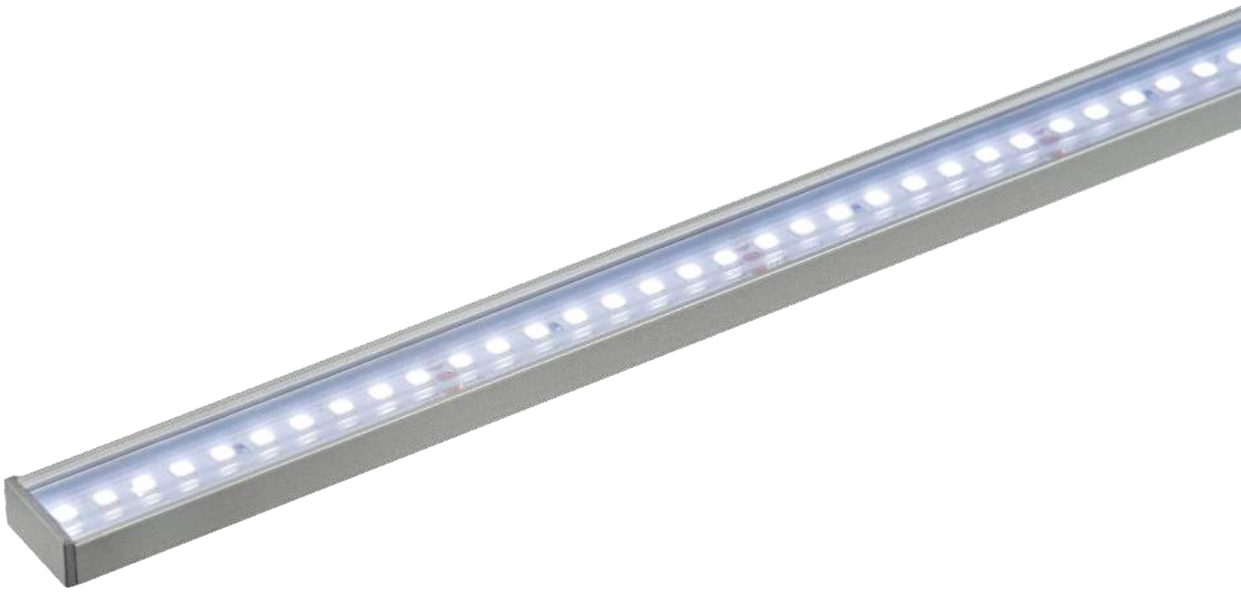

ALTAIR is an Italian energy efficient LED lamp designed to promote the growth of plants in very humid environments and in the presence of water. It can be used in closed rooms, indoor spaces and laboratories for micropropagation, sprout growth and grafting.

This lamp is solid and waterproof and is ideal for the replacement of the classic T8 fluorescent lamp, since the energy savings will be up to 60%.

ALTAIR emits light evenly and with a wide output angle (150°).

ALTAIR

AQUILA MULTI-CHANNEL

Supply Voltage	100 ÷ 305 Vac 50/60 Hz	Universal Supply Range.
Power Supply	25 ÷ 60 W	
Photon Flux - PAR output	80 ÷ 200 µmoles/s	
PAR Efficiency	3.00 ÷ 3.40 µmoles / J	
Working Temperature	0 ÷ 45 °C	
Dimensions	1000 ÷ 1500 x 32 x 32 mm	
Humidity Protection Grade	IP65	Strong protection against water and dust
Weight	680 g @ L=1.2 m	
Electrical Protection Systems	Short circuit, Overcurrent, Overvoltage, Overheating	
Emitted Light	Custom spectrum.	2, 4 or 6 Independent Channels
Dimmer	Optional.	Analogic, Digital, controlled via App
Retain of light power over time	90% after 100,000 working hours	

Aquila Multi-Channel The perfect lamp for research centers such as Universities, CNR and CREA: our Multi-Channel Aquila makes it possible to carry out experimental growth tests on many different crops. Obtain accurate cultivation parameters by varying both intensity and spectrum of the growlight. Aquila is a small lamp, suitable for small spaces such as shelves or vertical farms.

Each lamp has 2 independent channels and during the production phase each individual LED can be set to one or the other channel. By placing 2 or 3 lamps side by side we obtain 4 or 6 independent channels. Each of these channels is regulated by a separate power supply, which can be controlled via Dimmer adjustable either via App or with a 0-10 V control.

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ELETTRA MULTI-CHANNEL

Supply Voltage	100 ÷ 305 Vac 50/60 Hz	Universal Supply Range
Power Supply	300 ÷ 330 W	
Photon Flux - PAR output	900 ÷ 1100 µmoles/s	
PAR Efficiency	3.00 ÷ 3.40 µmoles / J	
Working Temperature	0 ÷ 45 °C	
Dimensions	690 x 180 x 130 mm	
Humidity Protection Grade	IP65	Strong protection against water and dust
Weight	5.5 Kg	
Electrical Protection Systems	Short circuit, Overcurrent, Overvoltage, Overheating	
Emitted Light	Custom spectrum. Up to16 Independent Channels, one of which for UV	
Dimmer	Optional.	Analogic, Digital, controlled via App
Interface	RS485, WiFi, Bluetooth, Ethernet	
Retain of light power over time	90% after 100,000 working hours	

Elettra Multi-Channel Vary the intensity of the light AND its spectrum, test different lighting conditions and compare the results in a repeatable and predictable way.
With up to 16 independent channels available - one of which is dedicated to UV light – Multi-Channel Elettra is the top growlight solution for research centers such as Universities, CNR and CREA. Associate each wavelength to one or more of the available channels.

Control all channels using only 2 electrical wires through an optional external device with 0-10 Vdc signal. Alternatively use the Modbus RS485 or TCP/IP protocols. Connects via Bluetooth or WiFi to adjust the channels values on a dedicated App.
Each Elettra lamp uses a single power supply, with full control on the maximum power required.

SIRIO

Supply Voltage	200 ÷ 240 Vac 50/60 Hz
Power supply	24 W; Class II
Photon flux PAR output	72 µmoles/s
PAR efficiency	3.00 µmoles/J
Working temperature	0 ÷ 50°C
Dimensions and socket	160 x 80 x 160 mm; socket for track system with 3 lines
Protection grade	IP24
Weight	0.75 Kg
Protections	Short circuit, over temperature
Emitted light	Specific light for plant growth and excellent for human vision
Light orientation	Can be directed towards the plants
Light Intensity	Adjustable via DALI (to be requested)
Color of the lamp body	Black or White

DALI REGULATION

Our lamp SIRIO for decoration plants can be controlled via a DALI controller. Light intensity can be regulated from 0 to 100%. One single control, different light patterns for different areas - or single lamps.

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Sirio is a Made in Italy LED lamp for professional use, designed to guarantee a healthy growth to decorative plants. In order to survive, plants need a spectrum of light different than the one required by humans. Our lamps are meant for plants well-being or survival in indoor difficult conditions, while emitting a pleasant balance of colors for the human eye also.

Our lamps guarantee plants and flower survival also in total absence of natural light or in very dark environments, where no kind of phtosynthesis would be possible. Keep your indoor green healthy and beautiful in dark environments also. Even plants not suitable for indoor spaces are able to thrive and look healthy under the light of SIRIO.

SIRIO

GEMMA

Supply Voltage	220 ÷ 240 Vac 50/60 Hz
Power Supply	24 W
Photon Flux - PAR output	72 µmoles/s
PAR Efficiency	3.00 µmoles/J
Working Temperature	0 ÷ Z45 °C
Dimensions	Lamp Height 300 mm; Φ 80 mm; Cable Length 4 m
Humidity Protection Grade	IP24
Socket	Hanging from a cylindrical Ceiling Rose
Weight	1 Kg
Electrical Protection Systems	Short circuit, Overheating
Emitted Light	Specific light for plant growth and excellent for human vision
Light Orientation	Vertical – Lamp to be installed right above the lamps
Colour of the Lamp Body	Black or White

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GEMMA Made in Italy LED growlamp aimed at the well-being of indoor decorative plants, GEMMA is also a beautiful decoration object.

Its main purpose is to emit light both in the photosynthetic active region and within the visible light spectrum. It fulfils the light requirements of indoor plants - because vegetals need light just like they need any other nutrient. At the same time, GEMMA maintains the right balance of colors for a light that does not change the human vision and is pleasant to the human eye.

GEMMA is a suspension lamp: it adds a touch of style and elegance to indoor environments with decoration herbs and greenery. Energy-efficient, it comes with a 4-meters electric cable and is easy to install hanging from high ceilings also. GEMMA suits Vertical gardens, indoor gardens, offices, hotel lobbies, meeting rooms, canteens, restaurants, shopping centers, botanical gardens, additional lighting for growth, flower and plant sales departments (supermarkets, florists, garden centers,...), as well as any environment you want to decorate with a healthy and bright green.

GEMMA

FB 2401

Supply Voltage	180 ÷ 295 Vac 50/60 Hz
Power supply	24 W; Class II
Photon flux PAR output	72 µmoles/s
PAR efficiency	3.00 µmoles/J
Working temperature	0 ÷ 50°C
Dimensions	1165 x 145 mm; diameter hole on ceiling 170 mm
Protection grade	IP24
Weight	1,5 Kg
Protections	Short circuit, over temperature
Emitted light	Specific light for plant growth and excellent for human vision
Light orientation	Can be directed towards the plants
Light Intensity	Adjustable via DALI (to be requested)
Color of the lamp body	FB2401 Black, FE2401 White

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FB Light is essential for plants and has a major influence on their growth and well-being. When natural sunlight is not available, it can be replaced by artificial light that mimics it.

The **FB** line of lamps represents a series of high-efficiency recessed ceiling lamps for professional use, aimed at decorative plants. They are designed and built to promote the plant growth in environments where it is important to maintain a fair balance between colors so that the spectrum perceived by women and men is comparable to sunlight. The emitted light can be directed towards the plants and regulated via DALI.

Main applications:
Vertical gardens, indoor gardens, supplemental lighting, botanic gardens, flowers andplants departments in supermarkets.

FB 2401

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IMQ CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001:2015

IQNET RECOGNIZED CERTIFICATION

LED Light for you powered by OSRAM CERTIFIED PARTNER

AMBRALIGHT
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