New Products:

MB Hercules Ex
Explosion Proof
handheld UV light

GX Orion
Remote controlled
overhead UV Light

MB Iris
Camera mounted
UV Light

MB Poseidon
Blue
handheld Light

LABINO
NDT

Labino AB
50 Countries – 80 Distributors – 25 Service Centers

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> Innovative thinking and products is business as usual

Warm greetings to you from the Labino team, the global leader in high quality UV Inspection lights and measurement instruments.

It is often said by business leaders that innovation is everything. At Labino innovative thinking and products is business as usual. That is why browsing through this brochure you will find products that are original and cannot be found elsewhere. We are proud to be a source of inspiration for the industry with our first to market products. Enjoy using our explosion proof UV lights, water proof UV lights, wireless UV meters and more.

Over the years, Labino raised the bar with products of uncompromising quality and reliability that are in compliance with a wide range of Industry standards such as ASTM E3022-15 and ISO 3059-12, as well as PRIMES requirements such as Rolls-Royce RRES 90061, Airbus AITM6-1001, USAF, The Boeing Co., Pratt & Whitney.

Labino products are present in over 50 countries via distributors and service centres for local support. NDT technicians in the aerospace sector, military, transportation, oil and gas, mining, inspection shops, alternative energy, and more have trusted Labino products since 1994. My personal commitment is to continuously develop unique high quality products and serve you with a sense of responsibility. If you have any questions, suggestions or complaints please contact me directly at lisel.athanasiadis@labino.com.
My kindest regards to you and your team,

Lisel Athanasiadis
Managing Director

NDT Industries

We find solutions to your specific needs:

AEROSPACE
All PRIMES have a choice of a Labino UV light that complies with their respective internal requirements

MARITIME
Durable and waterproof products tested to function in extreme weather conditions

DEFENSE
Products build to comply with military specifications and standards

PIPELINES
All Labino handheld lamps have a battery option for field inspections

AUTOMOTIVE
Light and compact lights used 24 x 7 in a serial production environment

OIL & GAS
Explosion proof products keep your personnel and physical assets safe

Labino LED Lamps

We thoroughly investigate the specific needs of every industry and design unique products that address them.

Labino offers a wide range of LED lamps, equipped with a variety of features, to satisfy the needs of UV light users in all industries engaging with magnetic particle and liquid penetrant inspections. Labino products are especially designed to offer convenience without compromising performance. The key characteristic of all Labino LED products is that they weigh less than many comparable products on the market today and they are extremely durable.

At Labino we thoroughly investigate the specific needs of every industry and design unique products that address them. In critical industries such as aerospace, oil & gas and defense where the risk of an explosion is high, safety should be a priority. We are introducing to the market the first handheld explosion proof UV inspection light, MB Hercules Ex. This product prevents the loss of life and protects your assets.

Our LED product portfolio has grown even more with MB Iris, MB Poseidon, and GX Orion. All our LED products have been tested against industry standards such as ASTM E3022-15, EN ISO 3059-12 and specifications of PRIMES such as Rolls-Royce RRES 90061 and Airbus AITM6-1001. A summary of product compliance is provided in this section.

New LED Products

MB Hercules Ex has successfully completed all tests leading to the ATEX certification for Group II, Zone II (Certificate: ITS17ATEX402144X), IECEx, NFPA 70 Article 500 for Class I (divisions II locations), the Salt Fog Test as per MIL-STD-810F, and the Explosive Atmosphere Test as per MIL-STD-810G. This unique product complies with ASTM E3022-15, Rolls-Royce RRES 90061 and Airbus AITM6-1001.

Labino´s LED overhead inspection lamp, GX Orion, is a modular system that can be used to cover large areas. There are three different models to choose from, remote controlled with multiple UV intensities, UV on/off button only, UV and visible light on/off buttons only.

MB Iris is an extremely compact light that can be used together with automated systems that incorporate cameras to inspect hard to reach areas.

MB Poseidon is a blue light with 440 nm wavelength.

Summary of features available with each LED Model

Labino AB LED UV Lights	Built in White Light LED	Initial UV Intensity at 38 cm (15") (µW/cm²)	Number of LED's	Weight	Battery Option	Mains Option	White Light Block Filter	Beam Size (> 1 200 µW/cm²)	Available Power
GX SERIES – OVERHEAD LIGHT									
GX Orion REMOTE	×	1 500-7 000	10	2.6 kg (5.8 lbs)	–	×	×	330 mm X 230 mm	100v-230v
GX Orion UV & WH	×	≈ 7 000	10	2.5 kg (5.5 lbs)	–	×	×	330 mm X 230 mm	100v-230v
GX Orion UV	–	≈ 4 500	10	2.5 kg (5.5 lbs)	–	×	×	260 mm X 180 mm	100v-230v
BB SERIES – HANDHELD LIGHT									
BB Helios	–	≈ 8 500	9	Mains: 1.2 kg (2.64 lbs) Battery: 1.7 kg (3.74 lbs)	×	×	×	Ø 275 mm (10.8 ")	100v-230v 100v-230v
BB Ikaros	–	≈ 4 000	9	Mains: 1.2 kg (2.64 lbs) Battery: 1.7 kg (3.74 lbs)	×	×	×	Ø 250 mm (9.8 ")	100v-230v
MB SERIES – HANDHELD LIGHT									
MB Hercules Ex	–	≈ 4 000	4	888 grams (2.0 lbs)	×	–	×	Ø 190 mm (7.5 ")	100v-230v
MB Zeus	×	≈ 4 000	4	Mains: 732 grams (1.6 lbs) Battery: 781 grams (1.7 lbs)	×	×	×	Ø 200 mm (7.9 ")	100v-230v
MB Zeus with Athena	×	≈ 4 000	4	800 grams (1.8 lbs)	×	–	×	Ø 200 mm (7.9 ")	100v-230v
MB Hermes	–	≈ 4 000	4	Mains: 732 grams (1.6 lbs) Battery: 781 grams (1.7 lbs)	×	×	×	Ø 190 mm (7.5 ")	100v-230v
MB Hermes with Athena	–	≈ 4 000	4	800 grams (1.8 lbs)	×	–	×	Ø 190 mm (7.5 ")	100v-230v
MB Iris	–	≈ 4 000	4	568 grams (1.3 lbs)	–	×	×	Ø 190 mm (7.5 ")	100v-230v
MB Poseidon	–	Blue Light (440 nm)	4	Mains: 732 grams (1.6 lbs) Battery: 781 grams (1.7 lbs)	×	×	×	–	100v-230v
UVG SERIES – FLASHLIGHT / HEADLIGHT									
UVG3 Spotlight	–	≈ 25 000	1	Battery: 211 grams (7.4 oz)	×	–	×	Ø 30 mm (1.2 ")	100v-230v
UVG3 Midlight	–	≈ 8 000	1	Battery: 211 grams (7.4 oz)	×	–	×	Ø 100 mm (3.9 ")	100v-230v
UVG3 Floodight	–	≈ 3 000	1	Battery: 211 grams (7.4 oz)	×	–	×	Ø 130 mm (5.1 ")	100v-230v
UVG5 Spotlight	–	≈ 25 000	1	Battery: 211 grams (7.4 oz)	×	–	×	Ø 30 mm (1.2 ")	100v-230v
UVG5 Midlight	–	≈ 8 000	1	Battery: 211 grams (7.4 oz)	×	–	×	Ø 100 mm (3.9 ")	100v-230v
UVG5 Floodight	–	≈ 3 000	1	Battery: 211 grams (7.4 oz)	×	–	×	Ø 130 mm (5.1 ")	100v-230v

PLEASE NOTE: The above models are in compliance with the above ASTM and ISO standards as well as industry specifications as indicated on the table above irrespective of the power source (Battery or Mains).

Compliance with relevant ASTM and ISO Standards as well as Industry Engineering specifications

Labino AB LED UV Lights	Built in White Light LED	UV Intensity at 38 cm (15") ($\mu W/cm^2$)	COMPLIES WITH ASTM E3022-2015 Standard	COMPLIES WITH Rolls-Royce RRES 90061 Specification	COMPLIES WITH Airbus AITM6-1001 Testing Method	COMPLIES WITH Pratt & Whitney Requirements	COMPLIES WITH The Boeing Co Requirements	COMPLIES WITH ISO 3059-12 Standard	COMPLIES WITH USAF Requirements
GX SERIES – OVERHEAD LIGHT									
GX Orion REMOTE	×	1 500-7 000	×	–	–	–	–	×	–
GX Orion UV & WH	×	≈ 7 000	×	–	–	×	–	×	–
GX Orion UV	–	≈ 4 500	×	×	×	×	×	×	×
BB SERIES – HANDHELD LIGHT									
BB Helios	–	≈ 8 500	×	–	–	×	–	×	×
BB Ikaros	–	≈ 4 000	×	×	×	×	×	×	×
MB SERIES – HANDHELD LIGHT									
MB Hercules Ex	–	≈ 4 000	×	×	×	×	×	×	×
MB Zeus	×	≈ 4 000	×	–	×	×	–	×	–
MB Zeus with Athena	×	≈ 4 000	×	–	×	×	–	×	–
MB Hermes	–	≈ 4 000	×	×	×	×	×	×	×
MB Hermes with Athena	–	≈ 4 000	×	×	×	×	×	×	×
MB Iris	–	≈ 4 000	×	×	×	×	×	×	×
MB Poseidon	–	Blue Light (440 nm)	–	–	–	–	–	–	–
UVG SERIES – FLASHLIGHT / HEADLIGHT									
UVG3 Spotlight	–	≈ 25 000	–	–	–	–	–	×	–
UVG3 Midlight	–	≈ 8 000	×	–	–	×	–	×	×
UVG3 Floodight	–	≈ 3 000	×	–	×	×	×	×	×
UVG5 Spotlight	–	≈ 25 000	–	–	–	–	–	×	–
UVG5 Midlight	–	≈ 8 000	×	–	–	×	–	×	×
UVG5 Floodight	–	≈ 3 000	×	–	×	×	×	×	×

PLEASE NOTE: The above models are in compliance with the above ASTM and ISO standards as well as industry specifications as indicated on the table above irrespective of the power source (Battery or Mains).

MB Hercules Ex

Explosion proof handheld UV inspection light to safeguard your human resources and physical assets.

ON/OFF SWITCH
On/Off switch at the back prevents accidental activation.

FOUR UV LEDS WITH WHITE LIGHT BLOCK FILTERS
Four high quality UV LEDs with respective high quality white light block filters that do not suffer from solarization.

BATTERY POWERED
MB Hercules Ex is powered with two rechargeable batteries for ease of use in field inspections and tight work spaces.

CHARGE BATTERIES WITHOUT REMOVING FROM THE LAMP
A charger with an internal connector can be used to charge batteries without removing them from the lamp. Charger must not be used in explosive atmospheres.

MB Hercules Ex is an extremely durable product specifically developed for use in areas where the risk of an explosion is high. Use of explosion proof products is often required in Offshore Oil Rigs, Refineries, Aerospace, and Defense. It has successfully completed extremely tough tests, amongst them tests for thermal conditioning, Impact Tests, Drop Tests, IP tests that led to the ATEX certification (Certificate: ITS17ATEX402144X). This unique product is suitable for use in extreme weather conditions varying from 104° Fahrenheit (+ 40° Celsius) to minus 4° Fahrenheit (- 20° Celsius).

Furthermore, Hercules Ex has successfully completed all tests and audits leading to its certification for IECEx, NFPA 70 Article 500 for Class I (divisions II locations) and the United States military tests, Salt Fog Test and Explosive Atmosphere Test. It has an ingress protection marking of IP66.

This unique light is battery powered, it has four UV LEDs and has an intensity of 4,000 µw/cm². A charger is supplied with each lamp enabling users to charge the batteries without removing them from the lamp. Charging of batteries should only take place outside explosive atmospheres.

This unique product complies with ASTM E3022-15, Rolls-Royce RRES 90061 and Airbus AITM6-1001. A certificate of conformity is provided with every light as well as a 12 month warranty.

FACTS ABOUT MB HERCULES EX

Output Characteristics	MB Hercules Ex
Intensity	≈ 4 000 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > I 200 µw/cm²	Ø 190 mm (7.5 ")

At a distance of 38 cm (15 inches)

TECHNICAL DATA

	MB Hercules Ex
UV LED:	4
Wavelength:	365 nm (peak) +/- 5 nm
Estimated LED life time:	30 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Battery
Weight:	888 grams (2.0 lbs)
Battery running time:	3 hours (+/- 5%)

EXPLOSIVE ATMOSPHERE CERTIFICATIONS

ATEX certified for Group II, Zone II (Certificate: ITS17ATEX402144X), IECEx, NFPA 70 Article 500 for Class I (divisions II locations), Explosive Atmosphere Test as per MIL-STD-810G.

OPERATE THE LAMP AS MAINS WHILE CHARGING BATTERIES

A separate PSU supplied can charge the batteries. This charger can only be used outside explosive atmospheres.

PACKAGE INCLUDES:

Lamp, Car Charger, Four Batteries, UV Block Goggles, External Charger for wall outlet, Carrying Case, Charging Power Supply.

MB Zeus and MB Hermes
MB Iris and MB Poseidon

COMPLIES WITH ASTM E3022-2015 Standard

COMPLIES WITH Rolls-Royce RRES 90061 Specification

COMPLIES WITH Airbus AITM6-1001 Testing Method

Certified with an ingress protection marking of IP68 Waterproof, this light and compact lamp has been designed for heavy industries with a very difficult operating environment.

FOUR UV LEDS WITH WHITE LIGHT BLOCK FILTERS
Four high quality UV LEDs with respective high quality white light block filters that do not suffer from solarization.

ON/OFF SWITCH
On/Off switch at the back prevents accidental activation.

BATTERY INDICATOR
Four colors: green, yellow, orange and red – signal the user when the batteries are over 75%, 50-75%, 25-50% and below 25% charged respectively. With less than 10% left the red signal starts flashing.

OPERATE THE LAMP AS MAINS WHILE CHARGING BATTERIES
The battery version can operate like mains while charging the batteries via a connector at the back of the head.

MB MAINS ON A FLEXIBLE ARM
The mains version can be mounted on a flexible arm. The flexible arm can be supplied by Labino.

BATTERY OR MAINS POWERED
Powered with your choice of either two rechargeable batteries for ease of use in field inspections and tight work spaces or via Mains. The cable length is customizable. The mains version has a squared pin hole that can mount on a flexible arm.

MB Series products Zeus, Hermes and Iris are lights with UV output. They are compact and weigh less than many comparable products but are extremely robust in nature, designed for heavy industries with very difficult operating environments. The mains operated model weighs just 732 grams (1.6 lbs) and the battery operated model weighs just 781 grams (1.7 lbs). The Iris weigh 568 grams (1.3 lbs). MB Poseidon is a light with blue output.

The MB Series family of products has been specifically designed to meet the ASTM E3022-15 and ISO 3059-12 standards as well requirements set by the PRIMES. The optics used in the MB Series meet the Rolls-Royce RRES 90061 specification. The beam profile of the UV light is extremely homogenous without any footprints showing from the LEDs, shades, dark spots or other disturbing defects.

MB Zeus

Zeus has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards as well as the Airbus AITM6-1001. It generates an intensity of approximately 4 000 µw/cm² at 38 cm (15 inches) and is equipped with a white light LED for after inspection. The running time of the battery version is 2 hours.

FACTS ABOUT MB ZEUS

Output Characteristics	MB Zeus
Intensity	≈ 4 000 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > I 200 µw/cm²	Ø 200 mm (7.9 ")

At a distance of 38 cm (15 inches)

MB Hermes

Hermes has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards as well as with the internal requirements of all PRIMES mentioned on page 7 including Rolls-Royce RRES 90061 and Airbus AITM6-1001. It generates an intensity of approximately 4 000 µw/cm² at 38 cm (15 inches) and it does not have a white light LED. The running time of the battery version is 3 hours.

FACTS ABOUT MB HERMES

Output Characteristics	MB Hermes
Intensity	≈ 4 000 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > I 200 µw/cm²	Ø 200 mm (7.9 ")

At a distance of 38 cm (15 inches)

MB BATTERY MODELS WITH SPRAY CAN HOLDER ATHENA

An innovative accessory that can be mounted on any Zeus or Hermes battery model and allows the NDT Inspector to operate the spray can simultaneously with a strong UV light that is in compliance with ASTM E3022 and the PRIMES requirements listed on page 7.

MB IRIS FITS EVERYWHERE

Iris does not have a handle and therefore can be easily mounted on camera equipment designed to fit in tight spaces. It is particularly in use by aerospace companies as it is in compliance with ASTM E3022 and the PRIMES requirements listed on page 7.

BATTERY VERSION PACKAGE INCLUDES:

Lamp, Car Charger, Four Batteries, UV Block Goggles, External Charger for wall outlet, Carrying Case, Power supply for charging batteries while operating.

MAINS VERSION PACKAGE INCLUDES:

Lamp with 2.5 meter (8 feet) cord, Power Supply Unit 100-240V AC, AC power cord, UV Block Goggles, Carrying Case. The cord can be customized to the length of your choice.

MB Iris

MB Iris is an extremely compact light. It is used together with automated systems that incorporate cameras to inspect hard to reach areas such as pipes interior. Iris has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards as well as with the internal requirements of all PRIMES mentioned on page 7, including Rolls-Royce RRES 90061 and Airbus AITM6-1001. It generates an intensity of approximately 4 000 µw/cm² at 38 cm (15 inches). Iris comes only as mains and it is supplied with a mounting bracket.

FACTS ABOUT MB IRIS

Output Characteristics	MB Iris
Intensity	≈ 4 000 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > 1 200 µw/cm²	Ø 200 mm (7.9 ")

At a distance of 38 cm (15 inches)

MB Poseidon

MB Poseidon is an actinic blue light LED lamp offering a peak wavelength of 440 nm +/- 5 nm. Blue light method is suitable for detection of defects where ambient light is present. To ensure adequate contrast, inspection shall be carried out with the yellow contrast goggles supplied. MB Poseidon is designed in to be in compliance with SIS-CEN/TR 16638:2014.

TECHNICAL DATA

	MB Zeus, MB Hermes and MB Iris
UV LED:	4
Wavelength:	365 nm (peak) +/- 5 nm
Estimated LED life time:	30 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Battery and Mains
Weight Battery:	781 grams (1.7 lbs)
Weight Mains:	732 grams (1.6 lbs)
Weight MB Iris:	568 grams (1.3 lbs)
MB Zeus Battery running time:	2.5 hours (+/- 5%)
MB Hermes Battery running time:	2.5 hours (+/- 5%)

Accessories for MB Series

	MB Zeus, Hermes, Iris and Poseidon
UV Block Visor	
UV Block Goggles XC	
Flexible Arm	
Friction Arm	
Rubber Bumper	
Protection PSU Bracket	
Magnet for PSU	
Customized Carrying Case	
Thumb Screws for Battery Lid	

BB Helios and BB Ikaros

Powerful handheld UV light that produces a large beam, useful for covering large areas, widely used either in the field, on an MPI bench or a penetrant line.

NINE UV LEDS WITH WHITE LIGHT BLOCK FILTERS
Nine high quality UV LEDs with respective high quality white light block filters that do not suffer from solarization.

POWERED VIA BATTERY AND MAINS (DUO) OR JUST MAINS
Powered with your choice of either battery and mains or just mains. The battery version (referred to as DUO) can also be used as mains and operate the lamp while charging the battery.

BB BATTERY (DUO) OR MAINS ON A FLEXIBLE ARM
All BB Series models can be mounted on a flexible arm with the help of a handle adaptor. The flexible arm can be supplied by Labino.

ON/OFF SWITCH
On/Off switch at the back prevents accidental activation.

BB MAINS WITH CABLE WINDER
The mains version can be mounted on a cable winder with a 9.5 meter (31 feet) cable.

BATTERY VERSION PACKAGE INCLUDES:
Lamp, UV Block Goggles, Power supply for charging batteries while operating.

MAINS VERSION PACKAGE INCLUDES:
Lamp with 2 meter (6.6 feet) cord, Power Supply Unit 100-240V AC, AC power cord, UV Block Goggles.

BB Series products Hermes and Ikaros are lights with a powerful and wide UV output. They provide large coverage and weigh less than many comparable products. The mains operated model weighs just 1.2 kg (2.6 lbs) and the battery operated model weighs just 1.7 kg (3.7 lbs). They are widely used for field inspections or on an MPI bench. BB Series lamps have an ingress protection marking of IP65.

The BB Series family of products has been specifically designed to meet the ASTM E3022-15 and ISO 3059-12 standards as well requirements set by the PRIMES. The optics used in the BB Series meet the Rolls-Royce RRES 90061 specification. The beam profile of the UV light is extremely homogenous without any footprints showing from the LEDs, shades, dark spots or other disturbing defects.

BB Helios

Helios has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards. It generates an intensity of approximately 8 500 µw/cm² at 38 cm (15 inches). The running time of the battery version is 3.5 hours.

FACTS ABOUT BB HELIOS

Output Characteristics	BB Helios
Intensity	≈ 8 500 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > I 200 µw/cm²	Ø 275 mm (10.8 ")

At a distance of 38 cm (15 inches)

BB Ikaros

Ikaros has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards as well as with the internal requirements of all PRIMES described on page 7, including Rolls-Royce RRES 90061 and Airbus AITM6-1001. It generates an intensity of approximately 4 000 µw/cm^2 at 38 cm (15 inches) and it does not have a white light LED. The running time of the battery version is 3.5 hours.

FACTS ABOUT BB IKAROS

Output Characteristics	BB Ikaros
Intensity	≈ 4 000 µw/cm^2
Visible light	<1 Lux / 0.09 fc
Beam > 1 200 µw/cm^2	Ø 250 mm (9.8 ")

At a distance of 38 cm (15 inches)

TECHNICAL DATA

	BB Helios and Ikaros
UV LED:	9
Wavelength:	365 nm (peak) +/- 5 nm
Estimated LED life time:	30 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Battery and mains (DUO) or just mains
Weight DUO:	1.7 kg (3.7 lbs)
Weight Mains:	1.2 kg (2.6 lbs)
MB Helios Battery running time:	3.5 hours (+/- 5%)
MB Ikaros Battery running time:	3.5 hours (+/- 5%)

Accessories for BB Series

	BB Helios and Ikaros
UV Block Visor	
UV Block Goggles XC	
Cable winder	
Handle adaptor	
Flexible Arm	
Fricton Arm	
Mounting Yoke and brackets for stationary mounting	
Protection PSU Bracket	
Magnet for PSU	
Protection clear glass filter	
Customized Carrying Case	

GX Orion

Modular overhead UV system that allows you to design the desired covered area by mounting together multiple units.

OPERATE VIA A FOOT PEDAL OR A POWER BUTTON
Can be used as an on/off switch for the UV light to activate the last used intensity and the last recorded timer setting.

WITH A PLC INTERFACE
Orion comes with a PLC interface which can be used to monitor the UV light from a computerized panel.

WITH UV ON/OFF BUTTON ONLY
Orion comes with a UV only option as well.

WITH UV AND WHITE LIGHT ON/OFF BUTTON ONLY
Orion comes with a UV and white light only option as well.

REMOTE CONTROLLED
A remote control allows you to switch on/off the UV and White Light, change the intensity and set up the timer from a distance.

GLASS SURFACE WITH 10 UV LEDS AND 1 WHITE LIGHT
Glass surface prevents damage on sensitive components such as filters and LEDs.

Labino´s LED overhead inspection lamp, GX Orion, is a modular system that can be used to cover large areas. There are three different models to choose from, remote controlled with multiple UV intensities, UV on/off button only, and UV and visible light on/off buttons only.

The GX Series family of products has been specifically designed to meet the ASTM E3022-15 and ISO 3059-12 standards as well requirements set by the PRIMES. The optics used in the GX Series meet the Rolls-Royce RRES 90061 specification. The beam profile of the UV light is extremely homogenous without any footprints showing from the LEDs, shades, dark spots or other disturbing defects.

All GX Orion models have a built-in PLC interface designed to connect to your PLC system. You can chose a "mother" or a "slave" GX Orion unit, with or without remote panel, with or without on/off power switches and still be able to monitor the unit completely through your computer via the PLC interface.

GX Orion REMOTE

GX Orion REMOTE has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards. It generates an intensity that can be adjusted to vary from approximately 1 500 to 7 000 µw/cm² at 38 cm (15 inches). It has a powerful white light that can generate 1 000 lux (93 fc) at 30 cm (12 inches). A remote control allows you to switch on/off the UV and White Light, change the intensity and set up the timer from up to 5 meters (16 feet) away.

FACTS ABOUT GX ORION REMOTE

Output Characteristics	GX Orion REMOTE
Intensity	≈ 1 500 – 7 000 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > 1 200 µw/cm²	330 mm x 230 mm

At a distance of 38 cm (15 inches)

THREE GX ORION REMOTE MOUNTED TOGETHER ON THE SHORT SIDE
Multiple GX Orion REMOTE "slave" units can be mounted on a "mother" unit either on the long side or the short side.

THREE GX ORION REMOTE MOUNTED TOGETHER ON THE LONG SIDE
Multiple GX Orion REMOTE "slave" units can be mounted on a "mother" unit either on the long side or the short side.

THREE GX ORION UV MOUNTED TOGETHER ON THE SHORT SIDE
Multiple GX Orion UV "slave" units can be mounted on a "mother" unit either on the long side or the short side.

THREE GX ORION UV & WH MOUNTED TOGETHER ON THE SHORT SIDE
Multiple GX Orion UV & WH "slave" units can be mounted on a "mother" unit either on the long side or the short side.

GX Orion UV & WH

Orion UV & WH has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards. It generates an intensity of approximately 7 000 µw/cm² at 38 cm (15 inches). It has a powerful white light that can generate 1 000 lux (93 fc). This model does not have a remote, it comes with one UV and one white light ON/OFF button.

FACTS ABOUT GX ORION UV & WH

Output Characteristics	GX Orion UV & WH
Intensity	≈ 7 000 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > I 200 µw/cm²	330 mm x 230 mm

At a distance of 38 cm (15 inches)

GX Orion UV

Orion UV has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards as well as with the internal requirements of all PRIMES mentioned on page 7, including Rolls-Royce RRES 90061 and Airbus AITM6-1001. It generates an intensity of approximately 4 500 µw/cm2 at 38 cm (15 inches). This model does not have a remote, it comes with one UV ON/OFF button.

FACTS ABOUT GX ORION UV

Output Characteristics	GX Orion UV
Intensity	≈ 4 500 µw/cm²
Visible light	<1 Lux / 0.09 fc
Beam > I 200 µw/cm²	260 mm x 180 mm

At a distance of 38 cm (15 inches)

TECHNICAL DATA

	GX Orion
UV LED:	10
Wavelength:	365 nm (peak) +/- 5 nm
Estimated LED life time:	30 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Mains
Weight:	2.6 kg (5.8 lbs)

GX ORION "MOTHER" PACKAGE INCLUDES:
GX Orion lamp of your choice, 4 Stainless steel bars for mounting, 4 chains with snap links, Power Supply Unit, cable between PSU and GX unit, cable between PSU and wall socket.

GX ORION "SLAVE" PACKAGE INCLUDES:
GX Orion lamp with UV & WH or only UV LEDs, 2 stainless steel bars and 1 cable connection for assembly short side to short side, 2 stainless steel brackets and 1 cable connection for assembly long side to long side, 4 chains with snap links.

Accessories for GX Series

	GX Orion
UV Block Visor	
UV Block Goggles XC	
Foot Pedal	
Power Button	

UVG3 and UVG5

Small, light and powerful, UVG3 torch is inspectors' most convenient tool for quick inspections. UVG5, a compact, light and adjustable headlight frees your hands during inspections.

ONE UV LED WITH WHITE LIGHT BLOCK FILTER
A high quality UV LED with respective high quality white light block filter that does not suffer from solarization.

BATTERY POWERED
Powered by a battery that can be recharged either by a cigarette outlet in a vehicle or a wall outlet. Both chargers are supplied with each unit.

ON/OFF SWITCH
On/Off switch is positioned at the back to prevent accidental activation.

BELT HOLSTER
Each UVG3 torch is supplied with a belt holster.

ADJUSTABLE RUBBER BAND
Adjustable rubber bands fit directly on the head and/or helmets.

ADJUSTABLE LIGHT
The lamp can be adjusted to three different angles.

TORCH ON TRIPOD
UVG3 torches can be mounted on a Labino tripod.

UVG3 TORCH PACKAGE INCLUDES:
Lamp, Car Charger, Two Batteries, External Charger for wall outlet, belt holster, wrist band.

UVG3 KIT (SINGLE) PACKAGE INCLUDES:
Lamp, Car Charger, Two Batteries, UV Block Goggles, External Charger for wall outlet, carrying case, belt holster, wrist band.

UVG Series products UVG3 and UVG5 are small and compact lights with a powerful output that offer convenience during quick inspections. UVG3 weighs just 211 grams (7.4 oz) and the UVG5 weighs just 271 grams (9.4 oz). The UVG Series family of products has been specifically designed to meet the ASTM E3022-15 and ISO 3059-12 standards as well as requirements set by the PRIMES.

UVG3

UVG3 midlight and floodlight has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards. The UVG3 floodlight also complies with Airbus AITM6-1001. The midlight and floodlight generate an intensity of approximately 8 000 µw/cm² and 3 000 µw/cm² respectively at 38 cm (15 inches). The running time is 4.5 hours.

Design your own single or double UVG3 kit

UVG3 Series is available with just the lamp or as a kit. Kits include a carrying case and UV goggles. Design your own kit with one or two torches of any kind.

FACTS ABOUT UVG3

Output Characteristics	UVG3 Midlight	UVG3 Floodlight
Intensity	≈ 8 000 µw/cm²	≈ 3 000 µw/cm²
Visible light	<1 Lux / 0.09 fc	<1 Lux / 0.09 fc
Beam > 1 200 µw/cm²	Ø 100 mm (3.9 ")	Ø 130 mm (5.1 ")

At a distance of 38 cm (15 inches)

TECHNICAL DATA

	UVG3 and UVG5
UV LED:	1
Wavelength:	365 nm (peak) +/- 5 nm
Estimated LED life time:	30 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Battery
Weight UVG3:	211 grams (7.4 oz)
Weight UVG5:	271 grams (9.4 oz)
UVG3 Battery running time:	4.5 hours (+/- 5%)
UVG5 Battery running time:	4.5 hours (+/- 5%)

UVG5

UVG5 midlight and floodlight has been tested to comply with both ASTM E3022-15 and ISO 3059-12 standards. The UVG5 floodlight also complies with Airbus AITM6-1001. The midlight and floodlight generate an intensity of approximately 8 000 µw/cm² and 3 000 µw/cm² respectively at 38 cm (15 inches). The running time is 4.5 hours.

FACTS ABOUT UVG5

Output Characteristics	UVG5 Midlight	UVG5 Floodlight
Intensity	≈ 8 000 µw/cm²	≈ 3 000 µw/cm²
Visible light	<1 Lux / 0.09 fc	<1 Lux / 0.09 fc
Beam > I 200 µw/cm²	Ø 100 mm (3.9 ")	Ø 130 mm (5.1 ")

At a distance of 38 cm (15 inches)

Accessories for UVG Series

	UVG3 and UVG5
UV Block Visor	
UV Block Goggles XC	
Tripod	
Customized Carrying Case	

UVG3 KIT (DOUBLE) PACKAGE INCLUDES:
Two lamps, Car Charger, Three Batteries, UV Block Goggles, External Charger for wall outlet, carrying case, two belt holsters, two wrist bands.

UVG5 HEADLIGHT PACKAGE INCLUDES:
Lamp, Car Charger, Two Batteries, External Charger for wall outlet.

Apollo 1.0

Radiometer/photometer measuring UV and visible light via a wireless sensor, traceable to NIST.

WIRELESS SENSOR
Measures up to a distance of 5 feet (16 meters) from the Reader unit.

RED LCD SCREEN
Red LCD screen for easy readings in a dark environment and a peak function to identify the highest reading.

BATTERY POWERED
Reader unit powered by three "AA" batteries that last 100 hours of active measurement. Sensor unit powered by one "1/2 AA" lithium battery that lasts 600 hours of active measurement.

An instrument for accurate measurement of UV-A irradiation and visible illumination. Extra engineering effort is taken to make an accurate measurement of visible light emission from a UV-A lamp by incorporating a superior band pass filter containing only non-fluorescent filters. The instrument provides fast measurement as it offers auto ranging and concurrent measuring of visible light and UV-A irradiation. It is ergonomic and easy to use due to its light weight chassis, wireless sensor unit and compact size. Apollo 1.0 is traceable to NIST (USA's National Institute of Standards and Technology).

Sensor measurements and transmission of data is done via Bluetooth. The wireless sensor enables the user to measure from a distance of up to five meters. This feature ensures that the sensor unit is stable and no movement occurs from connecting cables during measurement. Each sensor unit has both the UV and White light sensors incorporated on it.

Apollo 1.0 comes as a single kit or as a double kit. The single kit includes one reader unit and one wireless sensor unit. A double kit includes one reader unit and two wireless sensor units. As only the sensor needs to be send for calibration, the double kit is a convenient tool so that operations are never disrupted. Please note that Aerospace companies that are audited by Nadcap must send in both the reader and the sensor when calibrating.

The meter features hold and peak functions. The Hold function stores the present value measured and the Peak button stores the highest value measured.

SPECTRAL SPECIFICATION APPOLLO 1.0

	UV Light Sensor
Spectral Range:	300 nm to 400 nm
Sensitivity Region (FWHM):	325 nm to 395 nm
Operation Range:	0 to 50,000 µW/cm²
Accuracy:	UV Light: +/- 4 %
	White Light Sensor
Spectral Range:	400 nm to 700 nm
Sensitivity Region (FWHM):	485 nm to 600 nm
Operation Range:	0 to 10 000 Lux (1 000 fc)
Accuracy:	Visible Light: +/- 3 %

APOLLO 1.0 SINGLE KIT PACKAGE INCLUDES:
Reader unit, Sensor unit, Calibration certificate, Carrying case.

APOLLO 1.0 DOUBLE KIT PACKAGE INCLUDES:
Reader unit, two sensor units, Calibration certificate, Carrying case.

NDT Industries

We find solutions to your specific needs:

WIND POWER

MINING

SPACE

NUCLEAR

REFINERY

INFRASTRUCTURE

Labino MPXL Lamps

These highly durable products with an easy to operate design offer more UV intensity and less weight, making your job easier and more efficient.

Labino MPXL lamps are available with a variety of features to give operators of black lights the opportunity to choose what best suits their needs. The choice of a model depends on the conditions under which an operator is using these lamps. Does an inspection need to cover small areas or large areas? Does it involve difficult structures and therefore a lighter lamp is required? Do they simply need more power or less power can suffice? We can accommodate all needs. Simply choose among the available features below.

Labino MPXL lights utilize 50 W and 35 W lamps. Depending on the model, choose between battery operated or mains operated or choose both (SuperXenon). Labino's new model, the SuperXenon, can carry a powerful 50 W lamp generating very high intensity and the docking battery can be switched into mains, and vice versa. Both power supplies can be used on the same unit. Most models are less than 3 kg (6.6 lbs) and are available with your choice of "no handle" (for easy mounting on benches or other areas), a "top handle" or a "pistol handle". All Labino MPXL models are available with spotlight, midlight or floodlight beam.

Summary of features available with each Led Model

Labino AB LED UV Lights	One housing	Two housings (luminary/ ballast)	Battery	Mains	UV Intensity *	Beam Profile (> 1 200 µW/cm²) *
SX SERIES – HANDHELD LIGHT						
SuperXenon 50 W Spotlight	×	–	×	×	60 000 µW/cm²	Ø 140 mm
SuperXenon 50 W Midlight	×	–	×	×	17 000 µW/cm²	Ø 230 mm
SuperXenon 50 W Floodlight	×	–	×	×	5 800 µW/cm²	Ø 290 mm
SuperXenon 35 W Spotlight	×	–	×	×	45 000 µW/cm²	Ø 125 mm
SuperXenon 35 W Midlight	×	–	×	×	10 000 µW/cm²	Ø 200 mm
SuperXenon 35 W Floodlight	×	–	×	×	4 000 µW/cm²	Ø 250 mm
135 SERIES – 35 W HANDHELD LIGHT						
Compact Spotlight	×	–	–	×	45 000 µW/cm²	Ø 125 mm
Compact Midlight	×	–	–	×	10 000 µW/cm²	Ø 200 mm
Compact Floodlight	×	–	–	×	4 000 µW/cm²	Ø 250 mm
DUO Spotlight	–	×	–	×	45 000 µW/cm²	Ø 125 mm
DUO Midlight	–	×	–	×	10 000 µW/cm²	Ø 200 mm
DUO Floodlight	–	×	–	×	4 000 µW/cm²	Ø 250 mm
TrAc Light Spotlight	×	–	×	–	45 000 µW/cm²	Ø 125 mm
TrAc Light Midlight	×	–	×	–	10 000 µW/cm²	Ø 200 mm
TrAc Light Floodlight	×	–	×	–	4 000 µW/cm²	Ø 250 mm
TrAc Light PRO Spotlight	–	×	×	–	45 000 µW/cm²	Ø 125 mm
TrAc Light PRO Midlight	–	×	×	–	10 000 µW/cm²	Ø 200 mm
TrAc Light PRO Floodlight	–	×	×	–	4 000 µW/cm²	Ø 250 mm

* At a distance of 38 cm (15 inches)

SuperXenon 50 W and SuperXenon 35 W

Light handheld device producing an extremely high UV intensity for use either inhouse or on the field by simply switching the docking device of mains with battery, both fit on the same lamp.

TOP HANDLE
A top handle can be chosen instead of the pistol handle.

NO HANDLE
No handle can be chosen and instead add a mounting bracket for fixed installation.

ON/OFF SWITCH
On/Off switch at the back prevents accidental activation.

BATTERY OR MAINS POWERED
Powered with your choice of either a rechargeable battery or via Mains equipped with a 2.8 meter (9 feet) long extendable cord. You can switch between a battery and mains on the same lamp, both devices fit to the same lamp.

Labino SuperXenon 50 W UV lamp is one of the most powerful handheld UV lamps on the market. The 50 W Xenon bulb generates an extremely high UV intensity, providing a very clear excitation of fluorescent material. This lamp makes it possible to search very large areas. You can use a floodlight reflector and still see excitations in daylight and at great distances. The Labino SuperXenon is also available with a 35 W UV bulb.

This lamp contains the electronics and bulb in a single housing and is available with no handle – add a mountain bracket instead, a pistol handle as well as a top handle. This product can be operated using two different power systems – battery as well as mains. The mains model weighs just 1.4 kg (3.1 lbs) and the battery operated model weighs 1.9 kg (4.2 lbs). The battery is a docking battery. You can easily replace to a new battery and charge the used one. You can also switch between a battery and mains on the same lamp by switching the docking devices – both fit to the same lamp. The mains model is equipped with a 2.8 meter (9 feet) long extendable cord.

Each lamp obtains full power in 5-15 seconds and can be switched on and off whenever used, without pre-cooling.

TECHNICAL DATA

	SuperXenon 50 W and SuperXenon 35 W
Power:	50 W or 35 W
Wavelength:	365 nm (peak) +/- 5 nm
Estimated UV bulb life:	2 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Battery or Mains
Weight Battery:	1.4 kg (3.1 lbs)
Weight Mains:	1.9 kg (4.2 lbs)
SuperXenon 50 W Battery running time:	1 hours (+/- 5%)
SuperXenon 35 W Battery running time:	1 hours (+/- 5%)

Accessories for SX Series

	SuperXenon 50 W and SuperXenon 35 W
UV Block Visor	
UV Block Goggles XC	
Protection PSU Bracket	
Magnet for PSU	
Customized Carrying Case	
Friction arm	

FACTS ABOUT SuperXenon 50 W

Output Characteristics	SuperXenon 50 W Spotlight	SuperXenon 50 W Midlight	SuperXenon50 W Floodlight
Intensity	≈ 60 000 µw/cm²	≈ 17 000 µw/cm²	≈ 5 800 µw/cm²
Visible light	<13 Lux / 1.3 fc	<5 Lux / 0.5 fc	<2 Lux / 0.2 fc
Beam > I 200 µw/cm²	Ø 140 mm (5.5 ")	Ø 230 mm (9.1 ")	Ø 290 mm (11.4 ")

FACTS ABOUT SuperXenon 35 W

Output Characteristics	SuperXenon 35 W Spotlight	SuperXenon 35 W Midlight	SuperXenon 35 W Floodlight
Intensity	≈ 45 000 µw/cm²	≈ 10 000 µw/cm²	≈ 4 000 µw/cm²
Visible light	<10 Lux / 1.0 fc	<3 Lux / 0.3 fc	<2 Lux / 0.2 fc
Beam > I 200 µw/cm²	Ø 125 mm (4.9 ")	Ø 200 mm (7.9 ")	Ø 250 mm (9.8 ")

Compact and DUO 35 W

High UV intensity and great portability.

COMPACT PH135 – PISTOL HANDLE
A pistol handle can be selected instead of the top handle.

COMPACT H135 – NO HANDLE
No handle can be selected and instead add a mounting bracket for fixed installation.

DUO PS135 – PISTOL HANDLE SHORT
Two-part lamp consisting of a light weight luminary unit with pistol handle and a ballast (electronics) unit can be selected.

DUO OSH135 – TOP HANDLE SHORT
Two-part lamp consisting of a light weight luminary unit with top handle and a ballast (electronics) unit can be selected.

DUO S135 – NO HANDLE
Two-part lamp consisting of a light weight luminary unit with no handle and a ballast (electronics) unit can be selected.

Labino Compact and DUO UV lamps are operated via mains only. These 35 W UV lamps generate a very high UV intensity, suitable for inspections in heavy industries with very difficult operating environments.

The Labino Compact lamp contains a trigger ballast (electronics) and a bulb in a single housing, making it easier for the operator to use and move around large inspection areas, it weighs 2.3 kg (5 lbs).

The Labino DUO is a two-part lamp consisting of a light weight luminary unit and a ballast (electronics) unit. The luminary unit weighs just 1.2 kg (2.6 lbs) and works best for time consuming and repetitive inspections within the same location. The ballast unit weighs 1.5 kg (3.3 lbs). This product is accompanied with two cords, a 3.0 meter (9.8 feet) cord that connects the luminary unit with the ballast unit and a 2.0 meter cord for the outlet.

Each lamp obtains full power in 5-15 seconds and can be switched on and off whenever used, without pre-cooling. 135 Series lamps have an ingress protection marking of IP65.

FACTS ABOUT COMPACT AND DUO 35 W

Output Characteristics	**Compact and DUO 35 W Spotlight**	**Compact and DUO 35 W Midlight**	**Compact and DUO 35 W Floodlight**
Intensity	≈ 45 000 µw/cm²	≈ 10 000 µw/cm²	≈ 4 000 µw/cm²
Visible light	<10 Lux / 1.0 fc	<3 Lux / 0.3 fc	<2 Lux / 0.2 fc
Beam > I 200 µw/cm²	Ø 125 mm (4.9 ")	Ø 200 mm (7.9 ")	Ø 250 mm (9.8 ")

TECHNICAL DATA

	Compact and DUO 35 W
Power:	35 W
Wavelength:	365 nm (peak) +/- 5 nm
Estimated UV bulb life:	2 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Mains
Weight Compact:	2.3 kg (5 lbs)
Weight DUO:	Luminary 1.2 kg (2.6 lbs)
	Ballast 1.5 kg (3.3 lbs)

Accessories for 135 Series

	Compact and DUO 35 W
UV Block Visor	
UV Block Goggles XC	
Protection PSU Bracket	
Magnet for PSU	
Customized Carrying Case	
Friction arm	

TrAc Light and TrAc Light PRO

High UV intensity and great portability.

TRAC LIGHT
Electronics, battery and bulb in a single housing.

TRAC LIGHT PRO
Two-part lamp consisting of electronics and luminary.

Labino TrAc Light and TrAc Light PRO are battery operated. Each unit is equipped with a 35 W lamp that creates a very robust UV intensity.

The Labino TrAc Light lamp contains the trigger ballast (electronics), battery and bulb in a single housing. It weighs 2.3 kg (5.1 lbs). The battery has a running time of 1.3 hours and each unit is equipped with a current regulator to keep the intensity stable when the battery fades.

The Labino TrAc Light PRO is a two-part lamp consisting of a light weight luminary unit and a ballast (electronics) unit. The luminary unit weighs just 1.1 kg (2.4 lbs) and the ballast unit weighs 2.4 kg (5.3 lbs). The battery has a running time of 2.5 hours.

Each lamp obtains full power in 5-15 seconds and can be switched on and off whenever used, without pre-cooling. 135 Series lamps have an ingress protection marking of IP65.

TECHNICAL DATA

	TrAck Light and TrAck Light PRO
Power:	35 W
Wavelength:	365 nm (peak) +/- 5 nm
Estimated UV bulb life:	2 000 hours
UV-B:	100% free from UV-B
Filter:	White light block filter
Power supply:	Battery
Weight TrAc Light:	2.3 kg (5.1 lbs)
Weight TrAc Light PRO:	Luminary 1.1 kg (2.4 lbs)
	Ballast 2.4 kg (5.3 lbs)
Battery running time TrAc Light:	1.3 hour (+/- 5%)
Battery running time TrAc Light PRO:	2.5 hour (+/- 5%)

Accessories for 135 Series

	TrAc Light and TrAc Light PRO
UV Block Visor	
UV Block Goggles XC	
Protection PSU Bracket	
Magnet for PSU	
Customized Carrying Case	
Friction arm	

FACTS ABOUT TRAC LIGHT AND TRAC LIGHT PRO

Output Characteristics	TrAc Light and TrAck Light PRO Spotlight	TrAc Light and TrAck Light PRO Midlight	TrAc Light and TrAck Light PRO Floodlight
Intensity	≈ 45 000 µw/cm²	≈ 10 000 µw/cm²	≈ 4 000 µw/cm²
Visible light	<10 Lux / 1.0 fc	<3 Lux / 0.3 fc	<2 Lux / 0.2 fc
Beam > I 200 µw/cm²	Ø 125 mm (4.9 ”)	Ø 200 mm (7.9 ”)	Ø 250 mm (9.8 ”)

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