



# Industrial Ex /ATEX & Workplace Safety

## EX /ATEX

Explosion-Proof Lighting ..... 1 - 2

## WORKPLACE SAFETY / SUPPORT

Equipment Bags & Harnesses ..... 3

Safety Workwear ..... 4

Personal LED Lighting ..... 4

AmeriGlo Light Sticks ..... 5



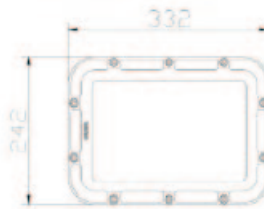
[www.MatrixTeam.com](http://www.MatrixTeam.com)

# Ex /ATEX Hazardous Area

## Explosion-Proof Lighting



### LP1 Series



#### Explosion-Proof Low-Power LED Area Light

Ex LED Area light was designed specially to offer the lighting system in a variety of Hazardous Area applications like the oil & gas industry, chemical industry, marine and offshore platforms.

#### Features

- Explosion-proof, rated for hazardous areas (e.g. oil and gas industry, chemical plants, etc.)
- Corrosion-resistant aluminum alloy body. Impact & shock resistant tempered glass
- Wall and ceiling mount options

#### Technical Specifications

Standard	IEC60079-0, IEC60079-1, IEC60079-31
ATEX Marks	Exd IIB T6 Gb/Ext IIIC T6 Db
Light Source	LED
Power Consumption	43W/55W/70W
Operating Voltage	AC 110-240V (50-60Hz)
Anti-Corrosion	C4/WF1/WF2
Operating Temperature	-30°C~+60°C
IP Rating	IP66
Humidity	10%~95%
Weight	17.6 lbs. (8KG)
Dimensions (D, W, H)	10.94 x 13.07 x 9.5" (278 x 332 x 242mm)



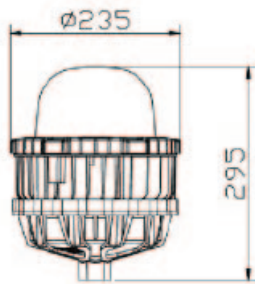
ATEX Standard:  
II 2 G Ex d IIB T6 Gb  
II 2 G Ex tb IIIC T6 Db



IECEx Standard:  
Ex d IIB T6 Gb  
Ex tb IIIC T6 Db

Part No.	Watts	Mount
LP103F	70W	Flange
LP103A	70W	Bracket
LP103X	70W	Ceiling

### LP2 Series



#### Explosion-Proof Low-Power LED Area Light

Ex LED Area light was designed specially for oil exploration, oil refining and the chemical and military industries as well as other dangerous environments.

#### Features

- Explosion-proof, rated for hazardous areas (e.g. oil and gas industry, chemical plants, offshore platforms, refineries)
- Corrosion-resistant aluminum alloy body. Impact- & shock-resistant tempered glass
- Adjustable flashing frequency

#### Technical Specifications

Standard	IEC60079-0, IEC60079-1, IEC60079-31
ATEX Marks	Ex d IIC T6 Gb/ Ex tb IIC T85 C Db IP66 Light Source
Light Source	LED
	9W (Warning Light)
Power Consumption	30W (Aviation/Obstruction Light) 20W, 30W, 45W, 55W (Area Light)
Operating Voltage	AC 110-240V (50-60Hz)
Anti-Corrosion	C4/WF2
Installation	Flange mount (F), bracket mount(A), Ceiling mount(X), 180° wall mount(B)
Color	Red/yellow/white (optional)
Operating Temperature	-40°C~+60°C
Operating Humidity	10%~95%
IP Rating	IP66
Weight	17.6 lbs. (8KG)
Dimensions (D, W, H)	9.25 x 9.25 x 11.61" (235 x 235 x 295mm)



ATEX Standard:  
II 2 G Ex d IIB T6 Gb  
II 2 G Ex tb IIIC T6 Db



IECEx Standard:  
Ex d IIB T6 Gb  
Ex tb IIIC T6 Db

Part No.	Watts	Mount	Light
LP205AL	45W	Bracket	Flood
LP205XL	45W	Ceiling	Flood
LP205FL	45W	Flange	Flood
LP202AO	30W	Bracket	Obstruction
LP202FO	30W	Flange	Obstruction
LP201AW	9W	Bracket	Warning
LP201XW	9W	Ceiling	Warning
LP201FW	9W	Flange	Warning

# Ex /ATEX Hazardous Area

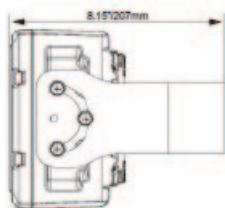
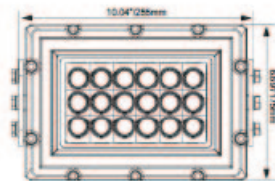
## Explosion-Proof Lighting



### High Bay ATEX /Ex Series

#### ATEX CE0575 EX II 2G Ex d II B T5 Gb

The High Bay ATEX/ Ex Series 40W light fixture by Vision X was designed for Hazardous Area applications.



#### Technical Specifications

Type	18 x XP-E (CREE) LEDs
Lumens	3,500 Lu
Beam Patterns	Spot 10° (SD), Narrow 25° (ND), Flood 60° (FD)
Color Temperature	6000K
Voltage	90-277V AC (Standard), 480V AC (HV - High Voltage)
Wattage	40W
Current Draw	0.43A @ 115V AC, 0.22A @ 230V AC, 0.18A @ 277V AC
Operating Temperature	-40°C - 40°C
Vibration	15.6Grms
IP Rating	IP68, IP69k
Certifications / Ratings	<b>ATEX/ Ex:</b> Zone 1, Zone 2, EX d, II B. <b>EMC Emission:</b> B, EN61000-3-2, Class C (@Load ≥ 50%); EN61000-3-3. <b>EMC Immunity:</b> EN55015, EN55022 (CISPR22) Class: EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, Light Industry Level (surge immunity) Line-Earth 4KV, Line-Line 2KV
Short Circuit	Constant current limiting, recovers automatically after fault condition is removed
Housing and Lens	Die-Cast 6061 Aluminum, Black in color: Polycarbonate Lens
Weight	21 lbs (9.5kg)
Dimensions (D, W, H)	8.15 x 10.04 x 6.89" (207 x 255 x 175mm)

Part No.	eLumens	Beam	Voltage	Watts
LUC18E-10	3500 Lu	Spot 10°	90-277V AC	40W
LUC18E-25	3500 Lu	Spot 35°	90-277V AC	40W
LUC18E-60	3500 Lu	Spot 60°	90-277V AC	40W

## Comparing ATEX / IECEx and North American NEC Classification

### NEC Class 1 - Gases / Vapors

#### DIVISIONS: North America NEC

**Division 1:** Hazardous material is present during normal operating conditions and a hazardous condition is expected to exist all or most of the time.

**Division 2:** The presence of hazardous materials is only expected under abnormal conditions, such as during container failures, leaks or system failures.

#### Gas Groups

##### Division 1 and 2

##### Zone 0,1 and 2:

A (acetylene)	IIC (acetylene and hydrogen)
B (hydrogen)	IIB (ethylene)
C (ethylene)	IIA (propane)
D (propane)	

#### Temperature Codes Min Temp

##### Division 1 and 2

##### Zone 0,1 and 2:

T 1 = 450°C	T 1 = 450°C
T2 = 300°C, T2A = 280°C, T2B = 260°C, T2C = 230°C, T2D = 215°C	T2 = 300°C
T3 = 200°C, T3A = 180°C, T3B = 165°C, T3C = 160°C	T3 = 200°C
T4 = 135°C, T4A = 120°C	T4 = 135°C
T5 = 100°C	T5 = 100°C
T6 = 85°C	T6 = 85°C

### ATEX / IECEx - Gases/Vapors

#### ZONES: ATEX / IECEx

**Zone 0:** An area where an explosive atmosphere is always present or may be present for an extended period of time.

**Zone 1:** An area where the atmosphere is likely to pose an explosion or firehazard during normal operations.

**Zone 2:** An area where an explosive atmosphere is not and should not normally be present during normal operations, and should it appear, will only be present for a short period of time.

**Matrix offers a free LED upgrade ROI analysis to support lighting upgrade decisions.**



# Worker Safety Gear

## Rugged Equipment Bags & Harnesses



**MATRIX**

### True North Equipment Bags / Chain Saw Bar Covers



Part No.	Color	Description	Materials	Weight	H x W x L
RD100	Black	Rolling Duffel Bag	Ballistic™ Nylon, Nylon Webbing Metal Hardware, Tarpaulin	8 lbs	14"H x 18"W x 30"L
TNG-SB**	Black	Saw Bar Cover	1000D Nylon, Leather, Nylon Webbing, Nylon Hardware	N/A	N/A

Sizes: 20" (508mm), 24" (610mm), 28" (711mm), 32" (813mm), 36" (914mm), 42" (1067mm)



### Radio Harness Gen 2

With adjustable pockets designed to fit all makes of radios and True North's internal suspension system, the Gen. 2 Radio Harnesses are even more comfortable, durable and functional than ever. NFPA 1977 Certified.



**Dozer Radio Harness  
Gen 2**



**Stealth Radio Harness  
Gen 2**



**Single Universal Radio  
Harness - Gen 2**



**Dual Universal Radio  
Harness - Gen 2**

#### The Dozer

- Adjustable radio pocket fits a wide range of models
- Front pocket fits large fire shelter
- Multiple storage throughout for batteries, maps, notebooks and pens
- Adjustable radio pocket fits a wide range of models
- Belt loops fit belts up to 1 3/4-inch
- Removable low-profile back harness made from durable Hypalon

#### Dual Universal

- 2 adjustable radio pockets fit a wide range of models
- Cell phone pocket developed to fit large phones and their cases
- Multiple storage throughout for batteries, maps, notebooks and pens
- Slots for holding two pens
- Can mount directly to your line pack shoulder harness
- Zippered front pocket for Kestrel or GPS

#### Single Universal

- Adjustable radio pocket fits a wide range of models
- Large map / notebook pocket with half-moon zip closure
- Cell phone pocket developed to fit large phones and their cases
- One buckle closure on radio pocket
- Spare battery pocket and more

Part No.	Description	Weight
RH200C-D-GEN2	True North Dozer Radio Harness Gen. 2	1.6lbs (0.75kg)
RH200C-S-GEN2	True North Stealth Radio Harness Gen. 2	1.6lbs (0.75kg)
RH200C-DU-GEN2	True North Dual Universal Radio Harness Gen. 2	1.6lbs (0.75kg)
RH200C-SU-GEN2	True North Single Universal Radio Harness Gen. 2	0.8lbs (0.4kg)

### Firefly Medic

This medic bag features include a drop-front opening for full, quick access, removable color-coded organizer pouches, two separate pockets for personal gear, zippered clear vinyl pockets for small meds and bandages and an optional O2 case (attaches to bottom of pack). NFPA 1977 Certified.

#### Features

- SCS™ patented shoulder strap design
- 100oz (3L) Hydration pocket (reservoir not included)
- Removable color-coded organizer pouches Velcro® in / out
- NFPA 1977 Certified
- Zippered vinyl pockets for small meds and bandages
- Drop-front opening for full, quick access
- Two separate pockets for personal gear
- Color-coded organizer pockets
- Optional O2 case (fits to bottom of pack)



Part No.	Description	Size	Weight
FF500	Firefy Medic Pack - Wildland	Small	6 lbs (2.7kg)
FF510	Firefy Medic Pack - Wildland	Standard	6 lbs (2.7kg)
FF600	Firefy Medic Pack - SAR (Search & Rescue)	Small	6.25 lbs (2.83kg)
FF610	Firefy Medic Pack - SAR (Search & Rescue)	Standard	6.25 lbs (2.83kg)

# Worker Safety Gear

## Rugged Safety Workwear / Personal LED Lighting



### PowerDry® Dual Hazard Hi-Vis Shirt



- Inherently fire- and arc-resistant stand-alone baselayer
- 3M Scotchlite™ segmented silver reflective
- Polartec® moisture wicking technology
- Highly breathable and dries quickly
- Extra-long hem with flat-lock seam construction
- Yellow shirt has navy fabric on wrists
- Fabric : Polartec® Power Dry FR®: Fire-resistant 6.4oz Rayon, Modacrylic, Para-aramid, Spandex and DuPont™ with Rayon, Modacrylic and Para-aramid

HRC2

NFPA 70E

NF PA 2112

Arc Rating 8.1 cal/cm<sup>2</sup>

### PowerGrid™ 1/4 Zip Dual Hazard Shirt



- Inherently fire- and arc-resistant stand-alone baselayer
- Moisture wicking, jersey microfiber face for easy layering
- Lofted, grid-structured fleece enhances airflow and dry time
- ¼-Zip neck with stand up collar
- Extra-long hem with flat-lock seam construction
- Polartec® Power Stretch FR® Fabric 9.2oz/sq yd – Rayon, Modacrylic, Para-aramid, Spandex and DuPont™ Nomex® Thread

HRC2

NFPA 70E

NF PA 2112

Arc Rating 8.1 cal/cm<sup>2</sup>

Part No.	Description	Color	Sizes
DFH04x	PowerDry Hi-Viz ANSI 107 Yellow Shirt (6.4 oz)	ANSI 107 Yellow	SM, MD, LG, XL, 2X, 3X
DFH05x	PowerDry Hi-Viz CSA Z96 Orange Shirt (6.4 oz)	CSA Z96 Orange	SM, MD, LG, XL, 2X, 3X

Part No.	Description	Color	Sizes
DFB20xDH	PowerGrid 1/4-Zip Dual Hazard Shirt (9.2 oz)	Black	SM, MD, LG, XL, 2X, 3X
DFB23xDH	PowerGrid 1/4-Zip Dual Hazard Shirt (9.2 oz)	Steel Grey	SM, MD, LG, XL, 2X, 3X

HRC1

Single base layer of FR protection. Required minimum Arc Rating 4 cal/cm<sup>2</sup>. HRC (Hazard Risk Category) is used to determine the necessary arc rating of a garment worn during a given job task.

NFPA 70E

National Fire Protection Administration standard for electrical safety in the workplace.

HRC2

One or more layers of FR protection. Required minimum Arc Rating 8 cal/cm<sup>2</sup>. HRC (Hazard Risk Category) is used to determine the necessary arc rating of a garment worn during a given job task.

NF PA 2112

National Fire Protection Administration standard for protection of industrial personnel against flash fire.

## Adventure Lights Guardian & VIP Series LED



The Guardian is the lightest, brightest, toughest light in its class. This light, unlike its competitors, is visible from all sides (omni-directional) and extremely impact-resistant. In addition, the Guardian is very lightweight and will not restrict movement. The product comes with a variety of attachments that can be fastened to either the user or equipment. The light is available with either a belt clip, wrist strap / arm band, swivel clip key chain attachment, or magnetic base.

Part No.	Color	Type	Voltage	Flash	Additional Information
ADV-50001	Red	1 LED	3V CR2032 Lithium	Steady On/ Flashing	Rugged, 300 ft waterproof, 3 mile (5km) visibility, CE 250 hr. battery time. Includes free clip or velcro strap
ADV-50001	Blue	1 LED	3V CR2032 Lithium	Steady On/ Flashing	Rugged, 300 ft waterproof, 3 mile (5km) visibility, CE 250 hr. battery time. Includes free clip or velcro strap
ADV-50002C	Blue	1 LED	3V CR2032 Lithium	Steady On/ Flashing	Rugged, 300 ft waterproof, 3 mile (5km) visibility, CE 250 hr. battery time. Includes belt clip
ADV-2504	Red	5 LED VIP Series	3V CR123A Lithium	Steady On/ SOS, Flashing	Impact resistant, waterproof, clip mount, 3 mile (5km) visibility, 6 mile (10km) from air, CE, 72 battery time

### Guardian Accessories:

ADV-49004	N/A	Velcro Strap	N/A	N/A	12" velcro attachment strap for all standard Guardian lights (not included). 11.8"x 1.2" (30x3cm)
ADV-49030	N/A	Belt Clip	N/A	N/A	Belt Clip for all standard Guardian lights (not included). For belts, straps, webbing, hats, clothing, collars, etc
ADV-49053	N/A	Velcro Strap	N/A	N/A	Male/ Female Velcro hook and loop attachments for Guardian warning light and helmet

## Adventure Lights



Guardian Warning Light (Red)



Guardian Warning Light (Blue)



VIP Series (Red)



Velcro Strap for Guardian Lights



Belt Clip for Guardian Lights



Velcro Hook & Loop for Guardian Lights

# Worker Safety Gear

## Light Sticks



### AmeriGlo Light Sticks

Part No.	Color	Type	Duration	Length	Additional Information
AMG-608HB10B	Blue	Chemical Light	8 hours	6" (152.4mm)	Blue light stick, waterproof, non-sparking, non-heat producing. For fire fighting, SCUBA , boating, emergency, gas leak lighting
AMG-608HW10B	White	Chemical Light	8 hours	6" (152.4mm)	White light stick, waterproof, non-sparking, non-heat producing. For fire fighting, SCUBA , boating, emergency, gas leak lighting
MG-608HG10B	Green	Chemical Light	8 hours	6" (152.4mm)	Green light stick, waterproof, non-sparking, non-heat producing. For fire fighting, SCUBA , boating, emergency, gas leak lighting
MG-608HO10B	Orange	Chemical Light	8 hours	6" (152.4mm)	Orange light stick, waterproof, non-sparking, non-heat producing. For fire fighting, SCUBA , boating, emergency, gas leak lighting
MG-608HR10B	Red	Chemical Light	8 hours	6" (152.4mm)	Red light stick, waterproof, non-sparking, non-heat producing. For fire fighting, SCUBA , boating, emergency, gas leak lighting
MG-608HY10B	Yellow	Chemical Light	8 hours	6" (152.4mm)	Yellow light stick, waterproof, non-sparking, non-heat producing. For fire fighting, SCUBA , boating, emergency, gas leak lighting

**Blue Light Stick  
8-Hour Duration**



**AMG-608HB10B**

**White Light Stick  
8-Hour Duration**



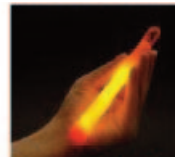
**AMG-608HW10B**

**Green Light Stick  
8-Hour Duration**



**AMG-608HG10B**

**Orange Light Stick  
8-Hour Duration**



**AMG-608HO10B**

**Red Light Stick  
8-Hour Duration**



**AMG-608HR10B**

**Yellow Light Stick  
8-Hour Duration**



**AMG-608HY10B**