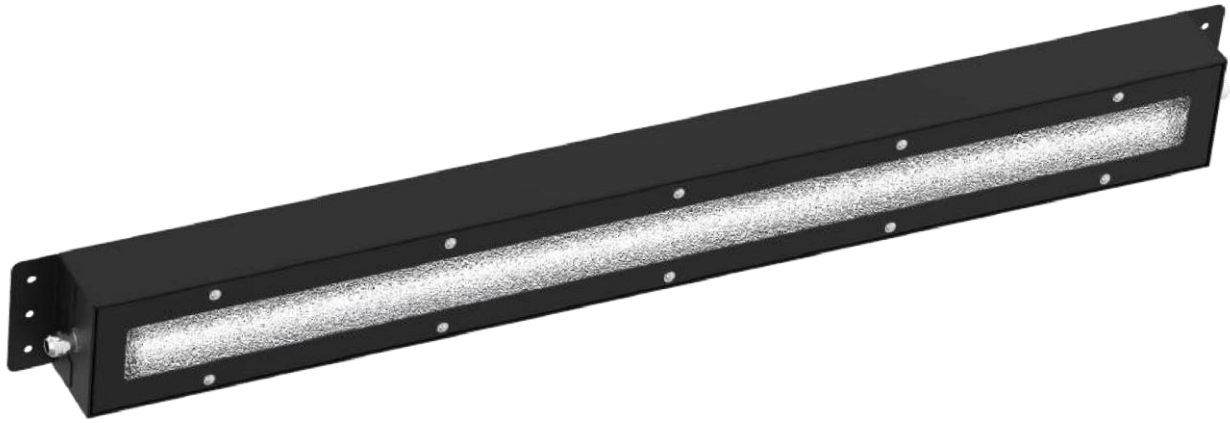


# ES INV320LED-RC shelters





CERTIFICATES: PKP PLK admission D/IST/03/2024,  
 ENEC PL BBJ/017/2018/M2,  
 CNBOP 4737/2022

## EXEMPLARY APPLICATIONS



PLATFORM SHELTERS



PASSAGEWAYS



PLACES PRONE TO ACTS OF VANDALISM

LED modules light fixture characterized by very high shock resistance (IK11+). The housing is made of powder coated stainless steel. The shade is made of prismatic polycarbonate. The fixture has been designed to be mounted in platform shelters and passageways.







Optional version with a 3h emergency power module **A3** or **A3S**, adapted to be powered from a central battery **ZB**, equipped with a **DAL-2** driver **DA**.

FEATURES



MECHANICAL PARAMETERS

	housing	powder coated stainless steel (NIRO)
	diffuser	prismatic polycarbonate (PC)
	shock resistance	IK11+ (150J)
	ingress protection	IP65
	protection class	II
	mounting	4 holes, easy mounting



ELECTRICAL PARAMETERS

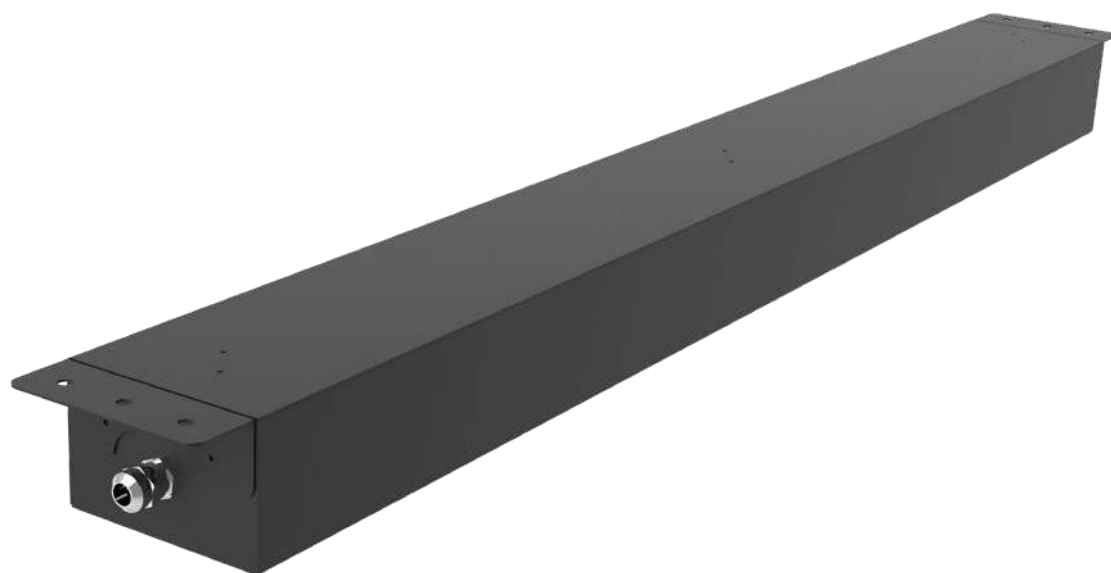
4,0 mm <sup>2</sup>		connection terminals
35E: 220-240V 0/50-60Hz 34E: 220-240V 50-60Hz		input voltage
LED modules with ENEC certificate		light source
>0,95		power factor
M20 (wire 6-13mm) PCI (wire 8-13mm)		cable inlets
L-N: 10kV		overvoltage protection


OTHER

	ambient temperature	-40° C to +45° C
	lifetime	>70.000h L <sub>80</sub> B <sub>10</sub>

PHOTOMETRICAL PARAMETERS

>80		CRI
4000K 3000K - <i>optionally</i>		color temperature



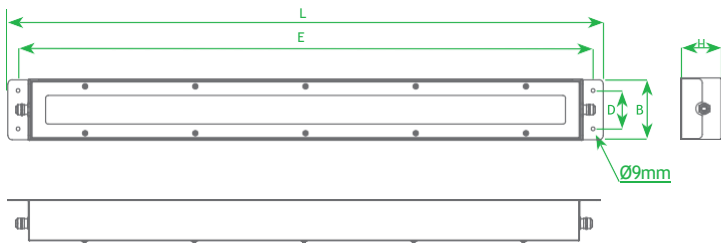
 Note: As standard, the housing is equipped with one gland at each end of the housing (11M20)



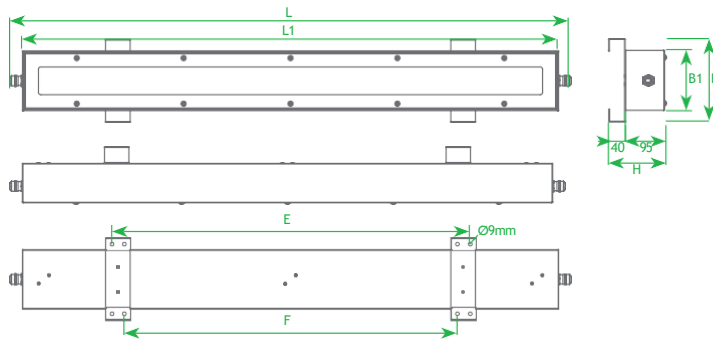


DIMENSIONS - NARROW VERSIONS

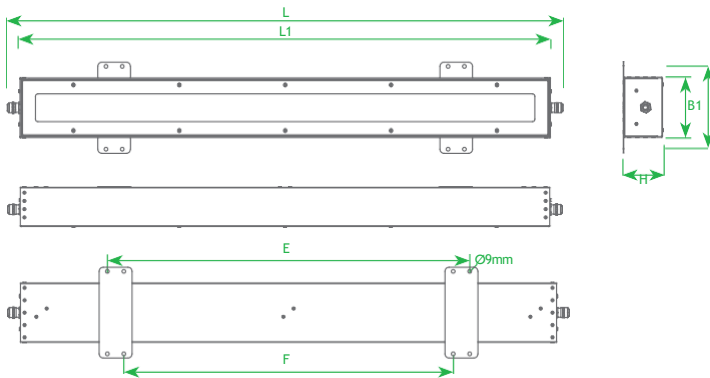
MOUNTING AMO20



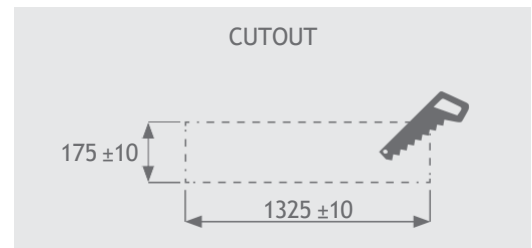
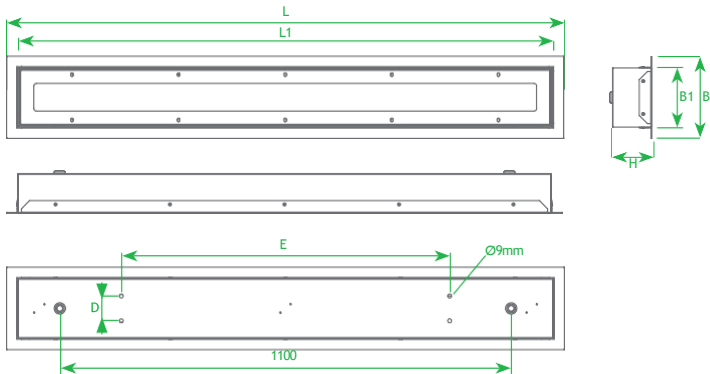
MOUNTING AMO21



MOUNTING AMO22



MOUNTING AMORC

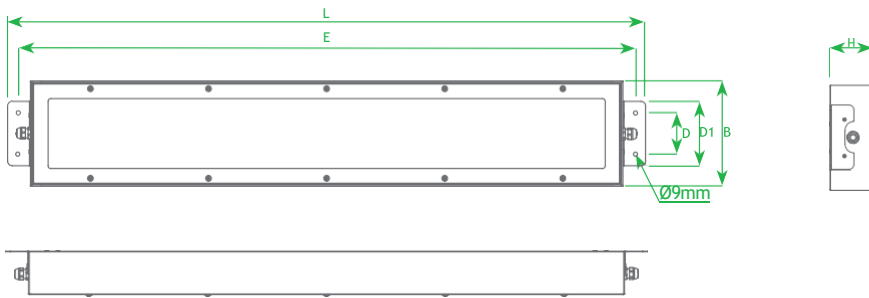


TYPE	L	L1	B	B1	D	E	F	H	weight [kg]
INV320LED-...-RC-AMO20	1405	-	145	-	90	1360	-	100	~10,0
INV320LED-...-RC-AMO21	1365	1305	200	145	170	870	810	135	~10,0
INV320LED-...-RC-AMO22	1365	1305	220	145	200	880	800	100	~10,0
INV320LED-...-RC-AMORC	1360	1310	200	150	60	800	-	100	~11,0

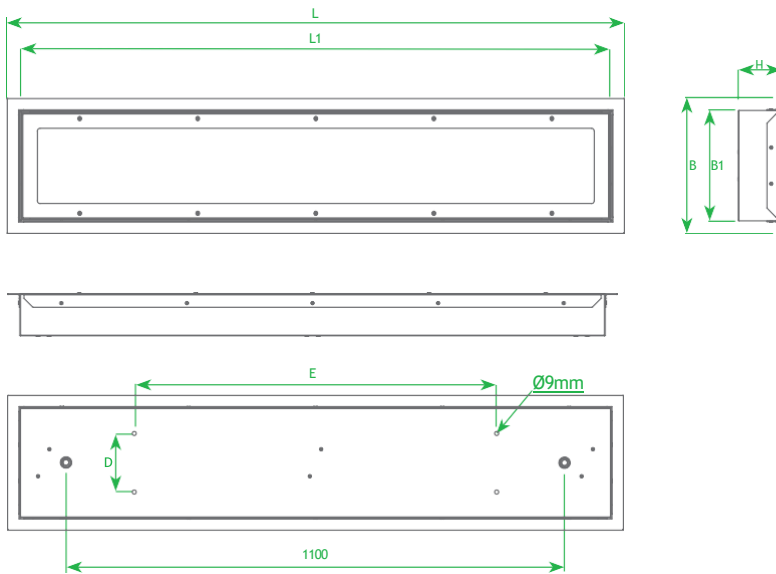
gross weight  
of standard version

DIMENSIONS - WIDE VERSIONS

MOUNTING AMO20



MOUNTING AMORC



TYPE	L [mm]	L1 [mm]	B [mm]	B1 [mm]	D [mm]	D1 [mm]	E [mm]	H [mm]	weight [kg]
INV320LED-1200-..-AMO20	1405	-	230	-	-	140	1360	100	~ 14
INV320LED-1200-..-AMORC	1360	1310	305	255	130	-	800	100	~ 15,5

*standard version weight*

TYPES COMPARISON

NARROW VERSIONS

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. WORK TEMP. [°C]
INV320LED-1200-J2-1	2288	18,2	126	45
INV320LED-1200-J2-3	3187	26,2	122	45
INV320LED-1200-B2-1	4576	35,4	129	40

WIDE VERSIONS

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. WORK TEMP. [°C]
INV320LED-1200-J4-3	6729	51,3	131	45
INV320LED-1200-B4-2	10450	80,3	130	40

Luminous flux tolerance +/- 10%

Power tolerance +/- 10%

The parameters given in the following data sheet has been determined for the temperature Ta=25°C.

Luminous flux, light intensity distribution and efficiency has been tested on the basis of the standards EN ISO 17025:2018-02, norm series EN13032 and LM-79.

The actual data and General Warranty Conditions are available on our website [www.atmlighting.pl](http://www.atmlighting.pl)





## MAXIMAL NUMBER OF LIGHT FITTINGS CONNECTED IN LINE


MAXIMAL QUANTITY OF LIGHT FITTINGS THAT MAY BE CONNECTED ACCORDING TO THE USED CIRCUIT BRAKER


Light fitting	B16	C16	Starting current	Starting time
INV320LED-J2, B2, J4	10	16	32A	< 355µs
INV320LED-B4, J4M2	5	8	65A	< 268µs


## EMERGENCY VERSION

 **Emergency power module:**  
**⚡ 34E** Version with 3h emergency module, available only with 34E power supply (230V, 50-60Hz).  
 The ambient temperature must be at least 0 °C. **A3**

 **Emergency power module:**  
**⚡ 34E** Version with 3h emergency module, available only with 34E power supply (230V, 50-60Hz).  
 The ambient temperature must be higher than -20 °C. **A3S**

 **Central battery:**  
**⚡ 35E** Version with driver for central battery - no switching module. **ZB**


 **Switching module:**  
**⚡ 35E** Version with driver for central battery - with switching module ES System MSU 35.  
 Work temperatures range: -5 °C to +45 °C. **ZBS**

 **Switching module:**  
**⚡ 35E** Version with driver for central battery - with switching module Hybrid SOAM-01.  
 Work temperatures range: -35 °C to +45 °C. **ZBH**


## MEAN EMERGENCY LUMINOUS FLUX

TYPE	A3 / A3S [lm]	ZB, ZBS, ZBH [lm]
INV320LED-1200-J2-1	565	1144
INV320LED-1200-J2-3	540	1594
INV320LED-1200-B2-1	741	2288
INV320LED-1200-J4-3	733	3365
INV320LED-1200-B4-2	735	5225

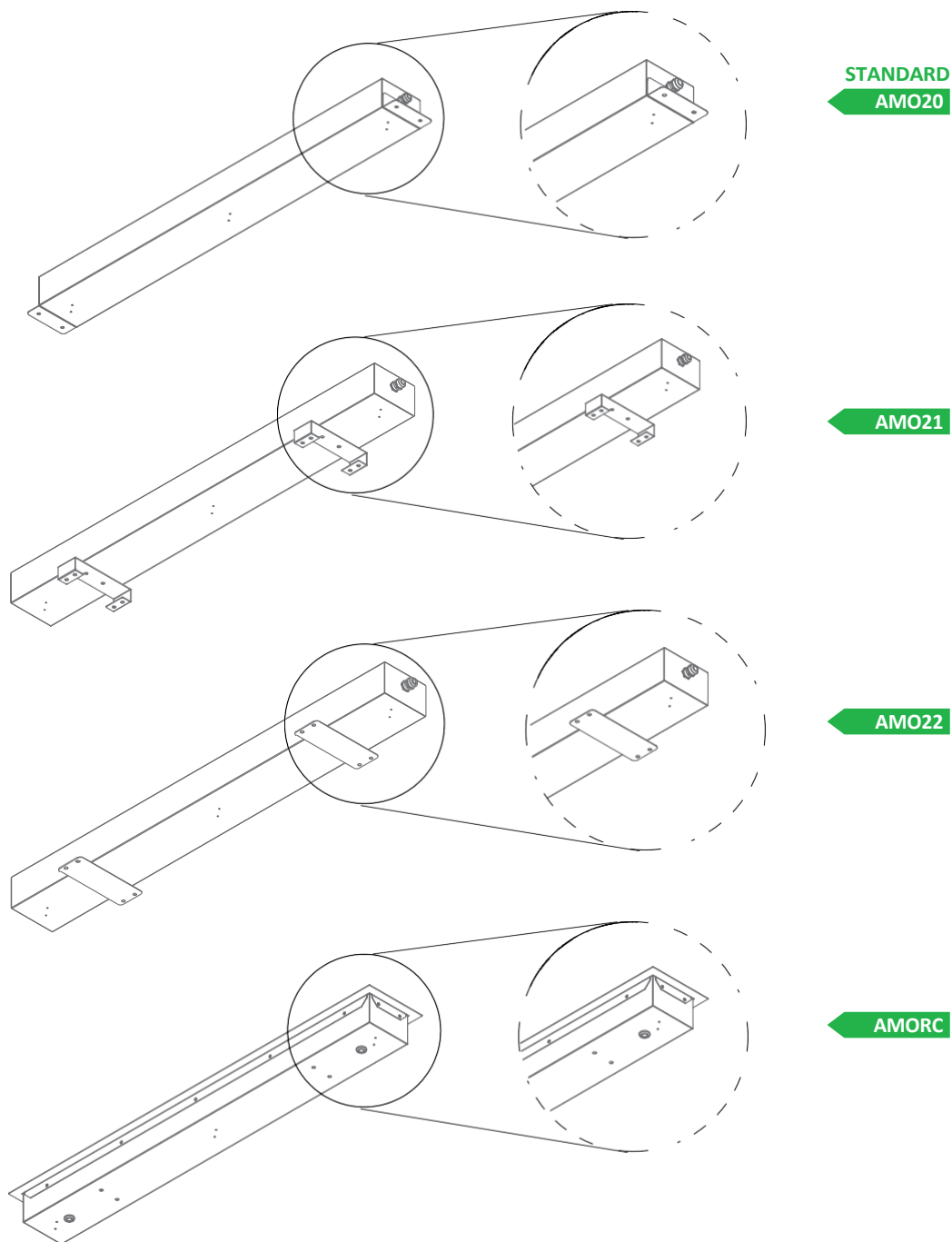
## OPTIONAL EQUIPMENT

 **DALI -2 interface:**  
 Version equipped with driver with DALI-2 interface **DA**

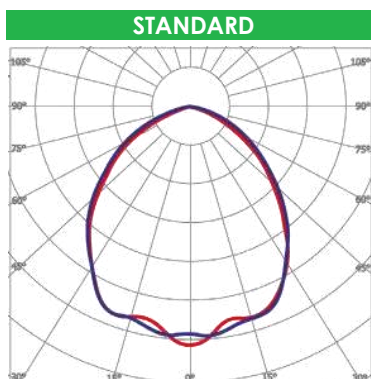
Optional DA version has been equipped with integrated driver with DALI-2 interface, which allows to monitor work of the luminaires, thanks to the data collected from the sensors or building information management system (BIM). Proper system configuration may reduce power consumption, costs and improve work ergonomics for users.  
**For temperatures below -30°C DALI functionality may be limited. Power supply at terminal > 12V.**

 **Attention:**  
 There is a possibility to order a linear lighting system which is a perfect solution to hide the wiring and to ensure additional functionalities. For more details please contact the Customer Service.

MOUNTINGS



PHOTOMETRY



CONFIGURATIONS

I	N	V	3	2	0	L	E	D	-	1	2	0	0	-	J	2	1	4	20	-	1	1	M	2	0	-	NIRO	-	PC	-	A3	-	II	-	RC	-	AMO20
														B	4	2	5	22															A3S	AMO21			
																3		30															ZB	AMO22			
																		33															ZBS	AMORC			
																		40															ZBH				
																		44																			
																		70																			
																		77																			

<b>group</b> vandalproof light fittings	J 2 1 4	20	PCI	A3	AMO20
<b>type</b> type 320	B 4 2 5	22		A3S	AMO21
<b>source of light</b> LED modules		30		ZB	AMO22
<b>approximate length</b> ~ 1200m		33		ZBS	AMORC
<b>LED module type</b>		40		ZBH	
<b>LED module quantity</b>		44			
<b>driving current</b>		70			
<b>power supply</b> 34E - 220-240V 50±60Hz 35E - 220-240V 0/50±60Hz		77			
<b>wiring</b>					
20 - single 2-pole terminal → 2	standard version				
22 - double 2-pole terminal → 2 2 ←	standard version				
30 - single 3-pole terminal → 3	A3, A3S version				
33 - double 3-pole terminal → 3 3 ←	A3, A3S version				
40 - single 4-pole terminal → 4	ZBS, DA version				
44 - double 4-pole terminal → 4 4 ←	ZBS, DA version				
70 - single 7-pole terminal → 7	ZBH version				
77 - double 7-pole terminal → 7 7 ←	ZBH version				
<b>cable inlets - quantity</b>					
11 - cable inlet on each side of the bottom of the housing → 1 1 ←					
<b>cable gland - size</b> M20 - Ø20 cable gland made of metal PCI - rubber cable inlet Ø20					
<b>housing material</b> NIRO - stainless steel					
<b>diffuser material</b> PC - prismatic polycarbonate (Exolon® UV Clear 2099 RH)					
<b>emergency versions</b> A3 - version with 3h emergency module available only with 34E power supply (230V/ 50±60Hz). Ambient temperature must be higher than 0 °C. A3S - version with 1h emergency module available only with 34E power supply (230V/ 50±60Hz). Ambient temperature must be higher than -20 °C. ZB - version with driver for central battery without switching module. ZBS - version with driver for central battery with switching module MSU 3S. ZBH - version with driver for central battery with switching module SOAM-01.					
<b>protection class</b> II - II class					
<b>mounting</b>					

ADDITIONAL INFORMATION

Additional mounting accessories are designed for the client's project. The light fitting is intended for installation on the roofs of platforms. Thanks to the solid and compact construction, high resistance to mechanical damage is ensured. Special tools are required to dismantle the system components, which prevents unauthorized access.