RELIANCE

Approach Flash System

Elevated and Inset



Compliance with Standards

FAA	EB 67D
ICAO	Annex 14, Vol. I
IEC	TS 61827
NATO	STANAG 3316
EASA	CS-ADR-DSN
Canada	TP312
Australia	MOS139

Uses

Approach sequential flash and threshold identification for CAT I, II and III operations

System Design

The RELIANCE™Approach Flash System, referred to as SFL, consists of a control unit, main chain (SFL - light 1..30), threshold identification (TIL - light 31..32) and power distribution units (1..32).

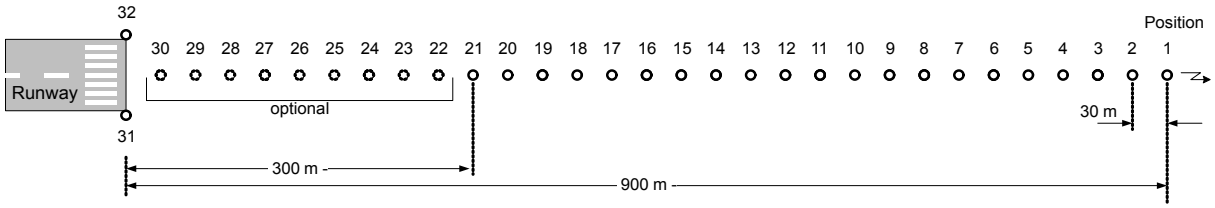
The RELIANCE SFL system enables following static (installation) or dynamic (configuration settings) system configurations:

- Full main chain with/without TIL (light 1..32)
- Reduced main chain with/without TIL (light 1..20 + 31..32)
- TIL without main chain (light 31..32)

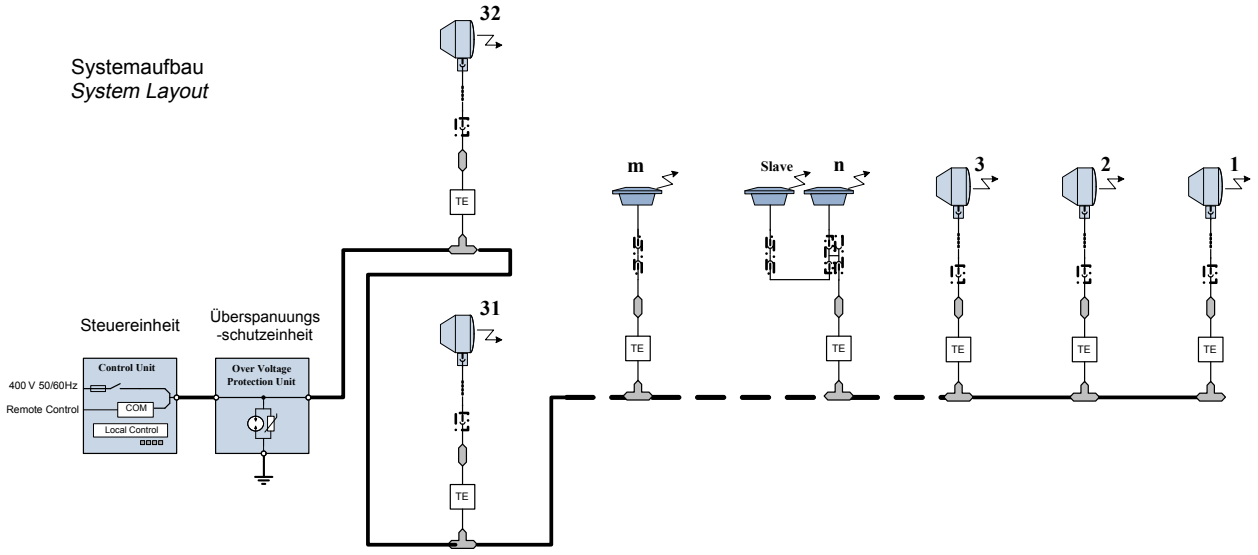
Elevated, single inset or double inset lights available for installation.

Features and Benefits

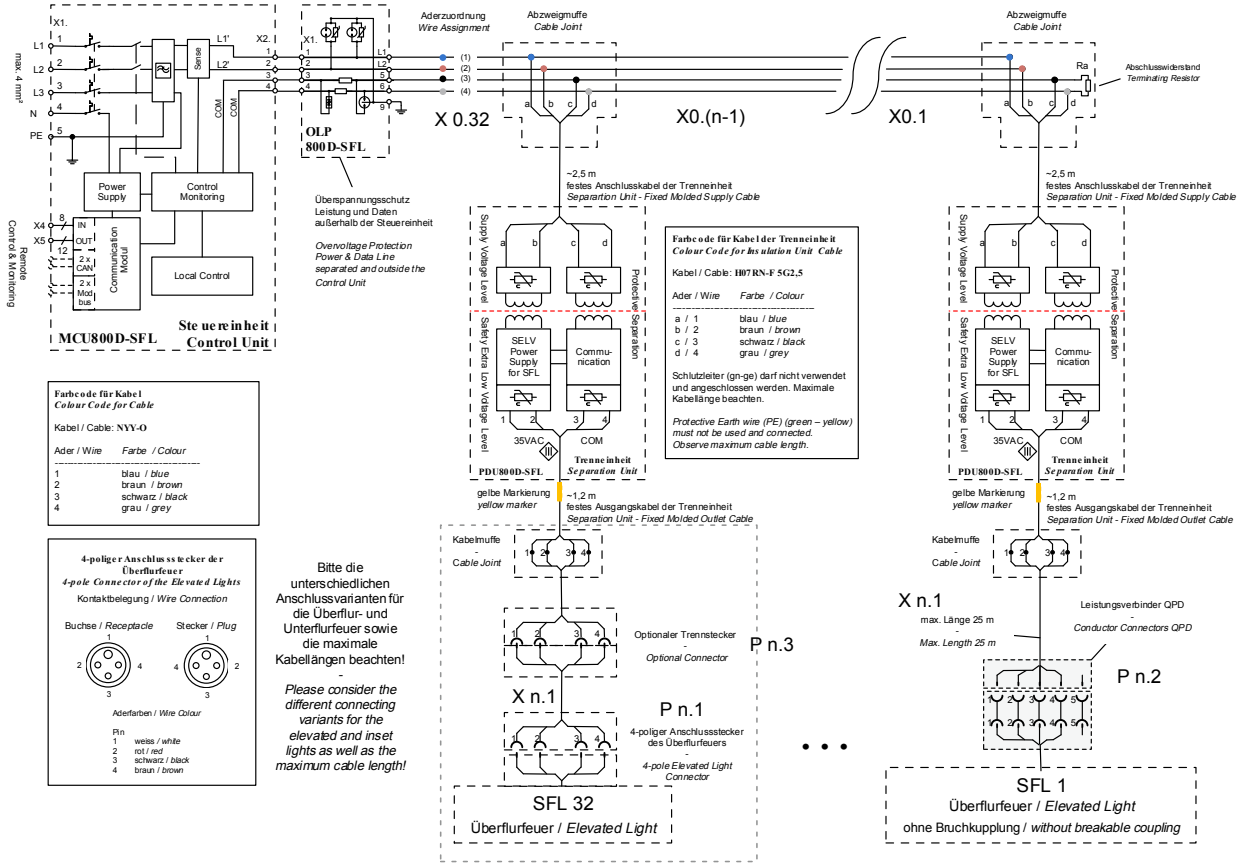
- Dynamic system configuration by parameter setting
- Single light monitoring even in standby mode
- Dynamic operation mode in 3 brightness steps (100%, 10% and 3%)
- Flash frequency switchable between 1 or 2 flashes per second
- Optional lights with high intensity
- Service local control at control unit possible
- Comfort control panel for service local control
- lucDMC Service Software
- Over voltage and lighting current protection of power and data lines
- Parallel remote control interface (default)
- 2× Serial remote control interface (redundant) with RS-485 MODBUS / RTU (optional)
- Optional remote control interface with Ethernet MODBUS/TCP or PROFIBUS DP (optional)
- Optional CANBUS interface (proprietary protocol for RELIANCE control system)
- SELV compliant lights
- EMI (Electro-Magnetic Interference) filter to harmonize power fluctuation



SFL System Layout



SFL System Detail



Control Unit (MCU800D-SFL)

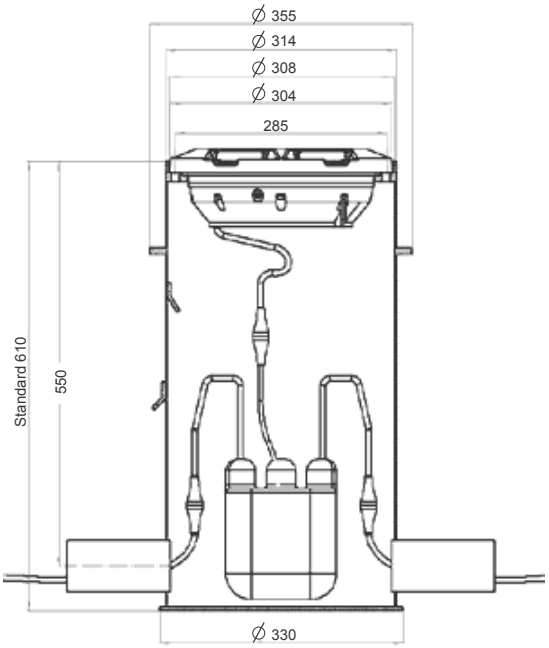
Power supply	Power circuit: 400 VAC, 3 Ph., 50/60 Hz
Power consumption	~1.4 kVA, asymmetric load, main load at L1/L2
Fuse	Internal fuse automat 10A fuse characteristic K
Communication interface remote control	1× parallel remote control interface (default) 2× serial remote control interface (redundant) with RS-485 MODBUS / RTU (optional) Optional remote control interface with Ethernet MODBUS/TCP or PROFIBUS DP Optional CANBUS interface (proprietary protocol for RELIANCE control system)
Communication interface comfort local control	I2C
Communication interface service computer	USB
Communication interface flash lights	2-wire power line
Environmental temperature	-25 to +45 °C
Relative humidity, not condensed	10 to 90%
International Protection class	IP 43
Altitude over NN (operation)	-100 to +2,500 m
Housing	Metal housing wall mounted
Dimensions (B × H × D)	600 × 600 × 210 mm
Weight	~22 kg

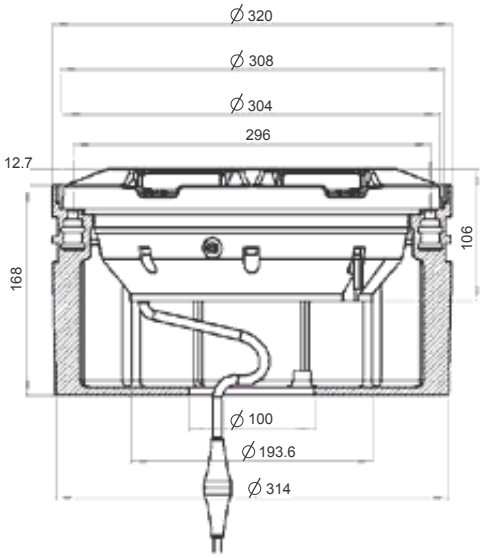
Power Distribution Unit (PDU800D-SFL)

Power circuit	Primary circuit: 400 VAC, 50/60 Hz Primary circuit: 36 VAC (SELV)
Power supply	Control voltage 24 V from the cabinet
Data communication	Primary circuit: Powerline Primary circuit: Powerline (SELV)
Environmental temp.	-40 to +55 °C
Relative humidity, not condensed	10 to 100%
Protection class	IP 68, 1 m immersion depth
Altitude over NN (operation)	-100 to +2,500 m
Housing	Full potted PU housing
Dimensions (D × L)	142 × 192 mm, without cable
Weight	~6.5 kg

In-Pavement Flashing Light

12″ shallow base and deep base can with transformer shown for complete view only but not part of the flash light. These articles can be ordered separately as accessories.





In-Pavement Flashing Light (SFL or RTIL)

Power supply	36 VAC, 50/60 Hz (SELV)
Max. power consumption	20 VA
Communication interface control unit	2-wire power line (SELV)
Environmental temp.	-25 to +85 °C
Relative humidity, not condensed	10 to 100%
Protection class	IP68
Altitude over NN (operation)	-100 to +2,500 m
Dimensions (W × H × D)	310 × 310 × 190 mm
Weight	6.9 kg
Intensity standard (dimmed)	6' 500 cd eff.
Intensity High	6' 500 cd eff. [1]
Nominal LED life	> 50.000 h

[1]For harmonization of the visual impression the use of double inset flash lights is recommended.

In-Pavement Flasher (IL868D) Ordering Information

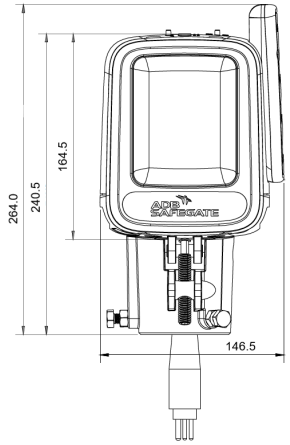
Description	Part	Ordering code[1]
Single inset Cold/W+ 1x 2m FAA 5 pole cable	IL868D-SFL/ TIL	868.211.1
Double inset Cold/W + 2x 2m 5 pole cable +1x H- Phoenix connector + 1x Phoenix connector	Double Set IL868D-SFL/ TIL	868.212.1
Single inset Cold/W - FAA 5 pole plug	IL868D-SFL/ TIL	868.200.1
Single inset Cold/W - Phoenix connector	IL868D-SFL/ TIL	868.205.1

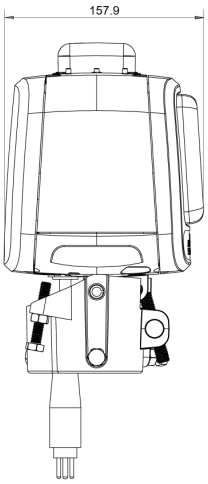
[1]Supply of required electric and installation parts (joint, T-joint, cabling) is not part of ADB SAFEGATE delivery but responsibility of the installer. For more details refer to manual.

AXON Elevated Flasher

Base plate and frangible pedestal are not shown and are not part of the flash light. These articles can be ordered separately as accessories.

See AXON elevated DS-5126 for more information





Elevated Flashing Light (SFL or RTIL)

See AXON elevated DS-5126 for more information

Ordering Code

	Application	Standards	Market Specific	Lens Type	Toe-in	Color - Side 1 (Left)	Color - Side 2 (Right)	Omnidirectional	Power Supply	Cable and Connector	Fixture Height	Coupling	Option 2	Advanced Connectivity	Refurbished	Version control
A																

Application
FL = Approach Flasher

Standards
3 = ICAO

Market Specific
0 = None

Lens Type
G = Glass
P = UV resistant polycarbonate

Toe-in
N = No toe-in

Color - Side 1 (Left)
W = White

Color - Side 2 (Right)
N = None (obscured)

Omnidirectional
0 = None

Power Supply
V = Voltage from System MCU

Cable and Connector
0 = 4/C Cable with Semi-Stripped Leads, 2.5 m
F = 4/C Cable with FAA Style 1 Molded Plug, 0.3 m[1]

Fixture Height
A = Approach mount for 60 mm mast or pole[2]

Coupling
A = No coupling (for approach only)

Option 2
0 = None
1 = Smart arctic kit
3 = Near infra red
4 = Smart arctic kit & near infra red

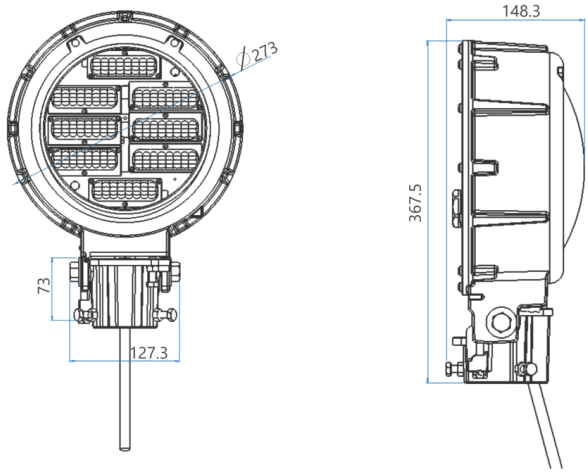
Advanced Connectivity
0 = 0

Refurbished
0 = 0

Version control
1 = 1

Reliance Elevated Flasher

Base plate and frangible pedestal are not shown and are not part of the flash light. These articles can be ordered separately as accessories.



Reliance Elevated Flashing Light (SFL or RTIL) – Technical Specifications

Power supply	36 VAC, 50/60 Hz (SELV)
Max. Power consumption	20 VA
Communication interface control unit	2-wire power line (SELV)
Environmental temp.	-25 to +85 °C
Relative humidity, not condensed	10 to 100%
Protection class	IP68
Altitude over NN (operation)	-100 to +2,500 m
Dimensions (W × H × D)	300 × 300 × 190 mm
Weight	~7.5 kg
Intensity standard (dimmed)	12' 500 cd eff.
Intensity high	21' 000 cd eff. [1]
Nominal LED life	> 50.000 h

1. For harmonization of the visual impression the use of double inset flash lights is recommended.

Elevated Flashing Light (EL 817D) Ordering Information

Description	Part	Ordering code[1]	Spare part number
Elevated Cold/W - FAA connector + receptacle[2]	EL 817D-SFL/TIL	817.213.5	SP.817.213.5
Elevated Cold/W - Phoenix connector + receptacle	EL 817D-SFL/TIL	817.214.5	SP.817.214.5
Elevated Cold/W - Phoenix connector + receptacle + FAA-lead (connector + receptacle)	EL 817D-SFL/TIL	817.215.5	SP.817.215.5
Elevated Cold/W Sim flash (+ pole)	EL 817D-SFL/TIL	817.216.5	SP.817.216.5
Elevated Cold/W - Phoenix connector (no receptacle)	EL 817D-SFL/TIL	817.203.5	SP.817.203.5
Elevated Cold/W - FAA connector (no receptacle)	EL 817D-SFL/TIL	817.204.5	SP.817.204.5

[1]ADB SAFEGATE does not supply the required electrical components and installation materials, such as joints, T-joints, and cables. The installer is responsible for supplying these items. For more information, refer to the manual.

[2]Refer to the manual. A 300-ohm termination resistor for the data lines is supplied with the MCU.

Control Cabinet and Software Ordering Information

Description	Part	Ordering code
MCU with multiwire interface	MCU 800D-SFL	MCU800D-SFL-20
MCU with CAN bus interface	MCU 800D-SFL	MCU800D-SFL-21
MCU with Modbus interface	MCU 800D-SFL	MCU800D-SFL-22
MCU with single Profibus interface	MCU 800D-SFL	MCU800D-SFL-23
MCU with redundant Profibus interface	MCU 800D-SFL	MCU800D-SFL-24
MCU with single Ethernet interface	MCU 800D-SFL	MCU800D-SFL-25
MCU with redundant Ethernet interface	MCU 800D-SFL	MCU800D-SFL-26
lucDMC + 1 license dongle	lucDMC	P1299
lucDMC + 2 license dongles	lucDMC	P1300
lucDMC + 3 license dongles	lucDMC	P1301
lucDMC + 4 license dongles	lucDMC	P1302
lucDMC + 5 license dongles	lucDMC	P1303
Dongle for inset lights	PSD800D-SFL	P1030
Master PCB	LUC12711410	SP.A3446
COM gateway	LUC12711420	SP.A3447
Power supply unit	MINI-PS-100-240AC/24DC/2	A1608
Mains filter	LUC15710110	SP.A3913

Transformer, Connection, and Mounting Ordering Information

Description	Part	Ordering Code
PDU SELV Isolating Unit	PDU800D-SFL	P864
Optional Overvoltage Protection	OLP800D-SFL	P1006
Optional Remote Monitoring for Data Line Overvoltage Protection	OLP Accessory	A5326
T-Connection Junction Box	JBX800D-SFL	P1029
Phoenix Connector Plug (QPD Nut included)[1]	QPD Plug	300.241
Phoenix Connector Receptacle (QPD Nut included)[1]	QPD Receptacle	300.245
Phoenix Connector H (QPD Nuts not included), Use Nut or Receptacle	QPD H Connector	300.244
Phoenix Dustcap (to seal off unused connections)	QPD Dustcap	300.243
Phoenix Nut (for reusing a Phoenix plug or receptacle)[1]	QPD Nut	300.246
FAA 4 pole Cable Lead Plug - 440 mm	FAA 4 pole Cable Lead Plug	MCMP10CF4U16-0.44
FAA 4-Pole Cable with Style 8 Receptacle - 2000 mm	FAA 4 pole Cable Lead Receptacle	MCMR80CF4U16-2.00
FAA 5-Pole Cable Lead with FAA Style 1 Plug - 300 mm	FAA 5-pole Cable Plug	205.043
FAA 5-Pole Cable with Style 8 Receptacle - 2000 mm	FAA 5-pole Cable Receptacle	205.044
Base Plate, 2"-11.5 NPS	Base Plate	061.607
Frangible Coupling, 2"-11.5 NPS	Pedestal	061.186
Eurobase, Waterproof with O-Ring (O-Ring: 7080.90.650)	Shallow Base	211.319
Optional data line overvoltage protection remote monitoring accessory	Data Line OVP Monitoring	A5326

1 The QPD Nut is considered a single-use nut and should be replaced when reusing a Phoenix connector.