

Edwards® 102 Series Trioptical® Stackable Status Indicator

DeviceNet™ PLC Compatible*



Cat. No. 102 Series

Features

- PLC Compatible
- Seven Interchangeable Light Source Modules -
 - Steady-On Incandescent
 - Steady-On Halogen
 - Steady-On LED
 - Flashing Incandescent
 - Flashing Halogen
 - Flashing LED
 - 300,000 peak candela Strobe
- Modules stackable in any combination or color
- Interchangeable light sources
- Base unit with optional horn
- Vibration resistant heavy duty industrial design
- Module rearrangement requires no rewiring
- Molded-in gasketed lens modules
- Mounting flange and 4", 10" and 15" mounting pipes

Description

The Edwards Trioptical Stackable Status Indicator is a unique audible-visual signaling device that can contain up to 5 light modules and a pulsating horn in a single "stack." All modules are gasketed.

Agency Approvals

- CE Marked
- UL Listed for indoor & outdoor applications
- NEMA 3R, 4X and IP65 Rated
- CSA Certified

Base Units

The Trioptical Stackable Status Indicator bases are available in three models. A shorter base is available for either conduit or surface mounting; A larger base designed for use with an optional tone module assembly. The larger base is also available with and optional DeviceNet interface.

Lens Modules

The diffusion optic lens allows viewing from close up while still projecting the light through use of a built-in

projection ring. The lenses are available in five colors: red, amber, blue, green, and clear. Each light source module contains a removable cover to allow for easy relamping. The light module cover features a molded-in gasket for dust tight reliability.

Double optics and the trioptical design provides an increased viewing area without increasing the base diameter. The lens modules can be easily stacked together utilizing an internal retaining assembly. A maximum of five modules in any combination of color or type can be stacked on the base unit.

Tone Modules

Two tone modules are available. A single tone module and a tone selectable tone module - one tone selectable from eight available tones. Provides up to 85 dB at 5 feet. The multi-tone module is also available with an

optional DeviceNet interface that allows all eight tones to be controlled over the DeviceNet network.

Light Sources

Steady-On Long Life Halogen and Standard Incandescent Light

The Steady-On light module provides a constant visual signal. It is ideal for start/stop functions, on/off processes or continuous duty visual signaling applications. When installed with other multiple color modules and the tone module, the unit can be config-

*PLC COMPATIBILITY

This device may be operated by PLCs that match the input load requirements of this signal. Be sure to match the input load characteristics of the signal with the output characteristics of the PLC before connecting.

Signal Input Load Characteristics

Cat. No.	Operating voltage Volts	Max. off state leakage current mA	Continuous on current mA	Peak current inrush/duration A/mSeconds
102SIGST-G1	24V DC	5	50	.24/.2
102SIGST-N5	120V AC	5	70	.35/.5
102SIGMT-G1	24V DC	5	50	.24/.2
102SIGMT-N5	120V AC	5	70	.35/.5
102LS-SIN-G1	24V DC	25	32	.36/1
102LS-SIN-N5	120V AC	25	80	.15/8
102LS-SINH-G1	24V DC	25	320	.36/1
102LS-SINH-N5	120V AC	25	110	.5/8
102LS-FIN-G1	24V DC	25	32	1.4/100
102LS-FIN-N5	120V AC	25	80	.3/8
102LS-FINH-G1	24V DC	25	320	1.2/100
102LS-FINH-N5	120V AC	25	110	1.15/8
102LS-ST-G1	24V DC	1.5	300	.33/1
102LS-ST-N5	120V AC	5	120	.50/1
102LS-SLED()-G1	24V DC	5	65	.025/1
102LS-SLED()-N5	120V AC	5	25	.09/8
102LS-FLED()-G1	24V DC	5	65	.07/1
102LS-FLED()-N5	120V AC	5	25	.09/8

DeviceNet is a registered trademark of the Allen Bradley Company.

- Visual Signals
- Electronic Signals
- Bells & Buzzers
- Horns & Sirens
- Message Centers & Annunciators
- Outdoor Warning Signals
- Electric Chimes
- Push Buttons Contactors Door Devices
- Transformers
- Fire Alarm Equipment
- Clocks
- ADA/Hospital Signaling Devices
- Telephone Signals & Accessories
- Appendix

ured to visually and audibly communicate status changes.

Steady-On LED

The 100,000 hour steady-on LED module provides a constant visual signal. The module is available in four colors: red, amber, blue and green. It is ideal for start/stop functions, on/off processes or continuous duty visual status indicating applications.

Flashing Long Life Halogen and Standard Incandescent Light

The Flashing Incandescent Light commands immediate attention. It works well as a warning signal when used with the steady-on module. Applications include audible and visual signaling of equipment malfunction.

Flashing LED

The 100,000 hour flashing LED module also commands attention and works well as a status indicating signal. The module is available in four colors: red, amber, blue and green. Applications include audible and visual signaling of equipment malfunction.

Strobe

The strobe module is ideal for high ambient light areas. When used with the incandescent or LED light modules, it can be used to effectively sig-

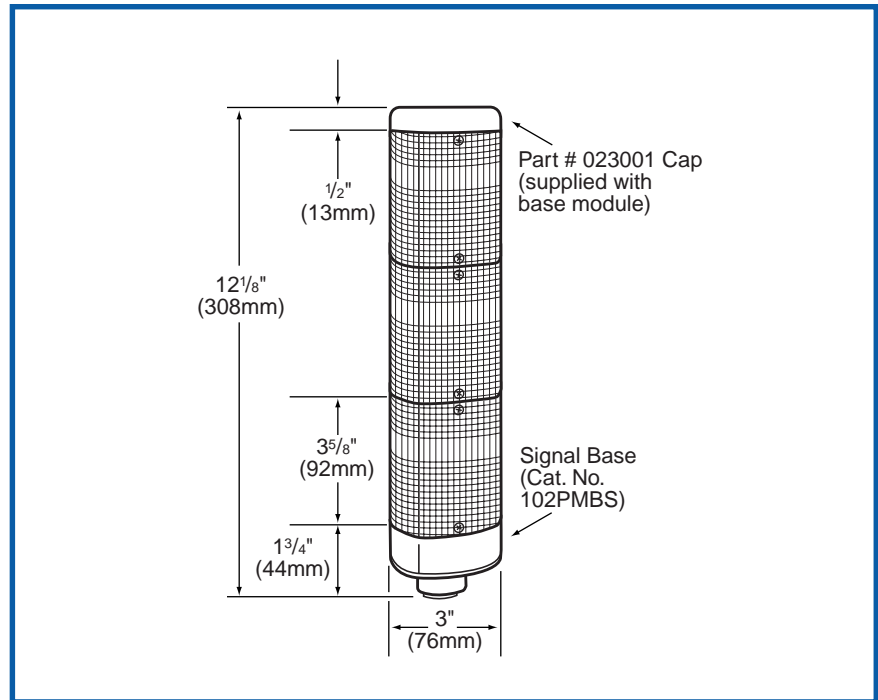
nal urgent status changes. Up to five self-contained strobe modules can be installed anywhere in the stack.

Mounting

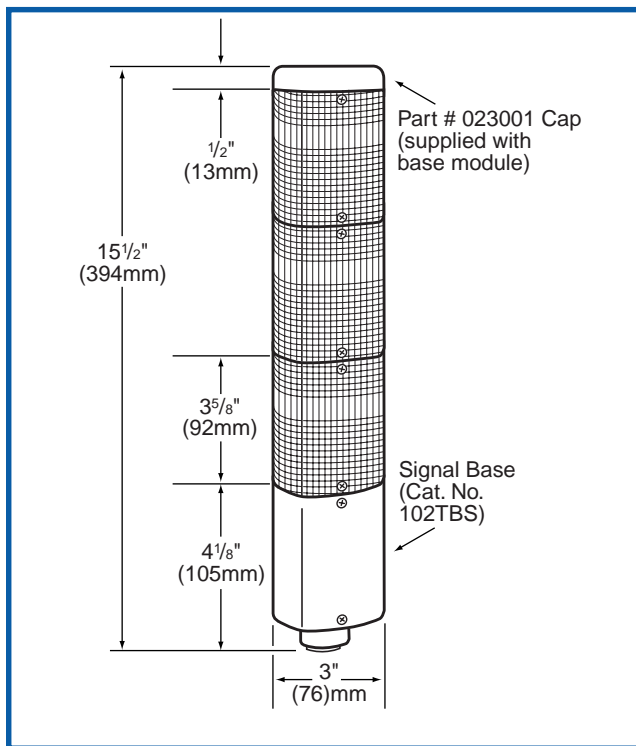
Surface or 3/4" (19mm) NPT conduit pipe mounting in non-hazardous dust

and weatherproof applications.

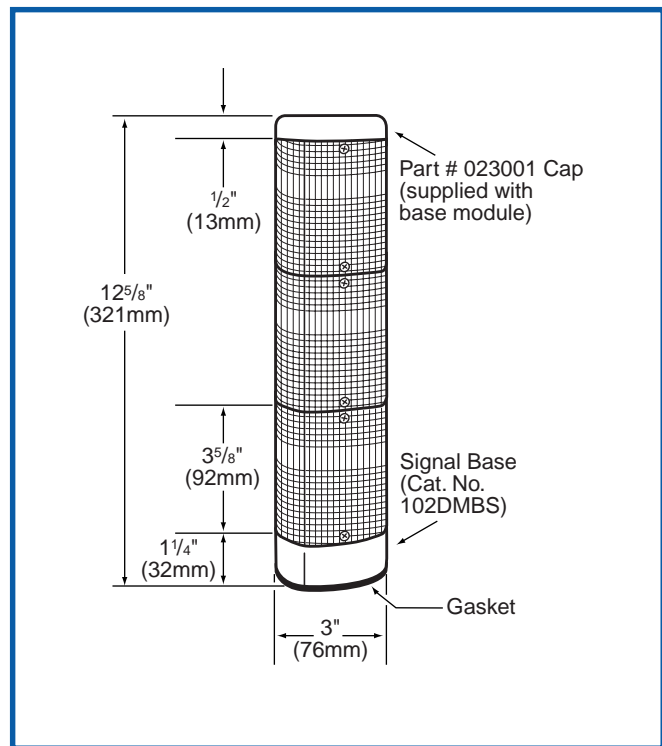
For indoor applications, may be vertically mounted with lenses facing up or down. For weatherproof installation, it is recommended that the unit be conduit mounted vertically with lenses facing up.



shown with 102PMBS mini base for 3/4" conduit mount



shown with 102TBS base with horn for 3/4" conduit mount



shown with 102DMBS mini base for direct panel mount

Catalog No.	Electrical Ratings	Lamp Ratings	Replacement Lamp	Lamp Life (hours)		Manufacturer's Light Output
				Calculated [#]	Projected ^{##}	
Base Unit - Use with optional horn assembly and 3/4" (19mm) conduit mount c/w cap						
102TBS-G1	24V DC, 1.75A ⁺	N/A	N/A	N/A	N/A	N/A
102TBS-N5	120V AC, 0.60A ⁺					
Base Unit - Mini base for direct panel mount c/w cap						
102DMBS-G1	24V DC, 1.75A ⁺	N/A	N/A	N/A	N/A	N/A
102DMBS-N5	120V AC, 0.60A ⁺					
Base Unit - Mini base for 3/4" (19 mm) conduit mount c/w cap						
102PMBS-G1	24V DC, 1.75A ⁺	N/A	N/A	N/A	N/A	N/A
102PMBS-N5	120V AC, 0.60A ⁺					
Optional Tone Module						
102SIGST-G1	24V DC, 0.05A	N/A	N/A	N/A	N/A	N/A
102SIGST-N5	120V AC, 0.05A					
102SIGMT-G1	24V DC, 0.05A	N/A	N/A	N/A	N/A	N/A
102SIGMT-N5	120V AC, 0.05A					
Pipe Mount Flange						
102PMF	N/A	N/A	N/A	N/A	N/A	N/A
Pipe Extensions (for use with Pipe Mount Flange)						
102MP-4 (4")	N/A	N/A	N/A	N/A	N/A	N/A
102MP-10 (10")	N/A	N/A	N/A	N/A	N/A	N/A
102MP-15 (15")	N/A	N/A	N/A	N/A	N/A	N/A
Lens Modules						
102LM-*	N/A	N/A	N/A	N/A	N/A	N/A
Steady-On Halogen Light Source						
102LS-SINH-G1	24V DC, 0.32A	9 Watts	50LMP-9WH	12,000	—	52 Lumens
102LS-SINH-N5	120V AC, 0.11A	12 Watts	50LMP-12WH	20,000	—	70 Lumens
Steady-On Standard Incandescent Light Source						
102LS-SIN-G1	24V DC, 0.32A	10 Watts	Ind. Trade 303	10,000	—	66 Lumens
102LS-SIN-N5	120V AC, 0.08A	10 Watts	50LMP-10W	2,500	—	66 Lumens
Flashing Halogen Light Source						
102LS-FINH-G1	24V DC, 0.32A	9 Watts	50LMP-9WH	12,000	15,000	52 Lumens
102LS-FINH-N5	120V AC, 0.11A	12 Watts	50LMP-12WH	20,000	25,000	70 Lumens
Flashing Standard Incandescent Light Source						
102LS-FIN-G1	24V DC, 0.32A	10 Watts	Ind. Trade 303	10,000	12,500	66 Lumens
102LS-FIN-N5	120V AC, 0.08A	10 Watts	50LMP-10W	2,500	3,000	66 Lumens
Strobe Light Source						
102LS-ST-G1	24V DC, 0.30A	3 Joule	N/A	3,000 ^{###}	—	300,000 peak cd
102LS-ST-N5	120V AC, 0.12A	3 Joule	N/A	3,000 ^{###}	—	300,000 peak cd
Steady-On LED Light Source						
102LS-SLEDA-G1**	24V DC	—	N/A	100,000	—	346 Lumens
102LS-SLEDB-G1**	0.062A					145 Lumens
102LS-SLEDG-G1**						145 Lumens
102LS-SLEDR-G1**						145 Lumens
102LS-SLEDW-G1**						145 Lumens
102LS-SLEDA-N5**	120V AC	—	N/A	100,000	—	346 Lumens
102LS-SLEDB-N5**	0.022A					145 Lumens
102LS-SLEDG-N5**						145 Lumens
102LS-SLEDR-N5**						145 Lumens
102LS-SLEDW-N5**						145 Lumens
Flashing LED Light Source						
102LS-FLEDA-G1**	24V DC	—	N/A	100,000	—	346 Lumens
102LS-FLEDB-G1**	0.062A					145 Lumens
102LS-FLEDG-G1**						145 Lumens
102LS-FLEDR-G1**						145 Lumens
102LS-FLEDW-G1**						145 Lumens
102LS-FLEDA-N5**	120V AC	—	N/A	100,000	—	346 Lumens
102LS-FLEDB-N5**	0.022A					145 Lumens
102LS-FLEDG-N5**						145 Lumens
102LS-FLEDR-N5**						145 Lumens
102LS-FLEDW-N5**						145 Lumens

*Currents shown are for a stackable with 5 light modules.

*Signifies lens module color (A - amber, B - blue, C - clear, G - green, R - red)

** **NOTE:** LED light sources must be used with the corresponding color lens module (e.g., a blue LED light source, 102LS-SLEDB-G1, must be used with a blue lens, 102LM-B).

⁺At nominal operating voltage.

^{##}Projected lamp life based on manufacturer's calculated lamp life @ 65 fpm and 50% duty cycle.

^{###}Strobe tube life @ operating power to 75% efficiency.

DeviceNet Compatible Stackable Beacon Lighting System

The 102 Series Trilipical Stackable Status Indicator has been tested by ODVA's authorized independent test lab and found to comply with ODVA conformance test software.

The DeviceNet interface is in the Trilipical DeviceNet Base, 102TBS-DN. The base interfaces between the DeviceNet network and all installed stacklight modules.

The Trilipical DeviceNet Stackable Beacon is a slave device. It is a general purpose status indicator de-

signed to indicate the status of a machine or process.

The unisolated physical layer contains DeviceNet required mis-wiring protection circuitry. A standard open style (unsealed) 5 pin connector is used to connect the Stackable Beacon to the DeviceNet bus. The current draw from the bus is 0.12A.

The Trilipical DeviceNet Stackable Beacon has LED, halogen, incandescent or strobe light sources which display the status of the machine or the process. The power required to drive the lamps is supplied separately from the bus power for the 120V AC (N5) version. DC power for the 24V DC

(G1) version may be taken locally or from the DeviceNet Network. A standard open style 2 pin connector is used to connect 24V DC @ 1.6A or 120V AC at 0.6A to drive the 5 light sources.

The Trilipical DeviceNet Stackable Beacon contains a preprogrammed microcontroller which implements the Group 2 pre-defined Master/Slave Connection Set. This allows for one Explicit Messaging Connection and one Poll Connection. The Stackable Beacon resets automatically when DeviceNet power is applied.

Catalog No.	Electrical Ratings	Lamp Ratings	Replacement Lamp	Lamp Life (hours)		Manufacturer's Light Output
				Calculated [#]	Projected ^{##}	
DeviceNet Base Unit - Use with optional horn assembly and 3/4" (19mm) conduit mount c/w cap						
102TBS-DN-G1	24V DC, 1.75A+	N/A	N/A	N/A	N/A	N/A
102TBS-DN-N5	120V AC, 0.60A+					
Optional DeviceNet Base Mounted Tone Module						
102SIGMT-DN-G1	24V DC, 0.05A	N/A	N/A	N/A	N/A	N/A
102SIGMT-DN-N5	120V AC, 0.05A					

Pre-Assembled Steady-On Incandescent Trilipical Stacklites, 3 high

The Trilipical Stackable Beacon is available pre-assembled in four different configurations — all in a 3 high stack.



**Cat. No.
102SIN-RGA**

Catalog No.	Voltage	Colors	Light Source Type
102SIN-RGA-G1	24V DC	Red, Green, Amber	Steady-On Incandescent
102SIN-RBA-G1	24V DC	Red, Blue, Amber	Steady-On Incandescent
102SIN-RGA-N5	120V AC	Red, Green, Amber	Steady-On Incandescent
102SIN-RBA-N5	120V AC	Red, Blue, Amber	Steady-On Incandescent