

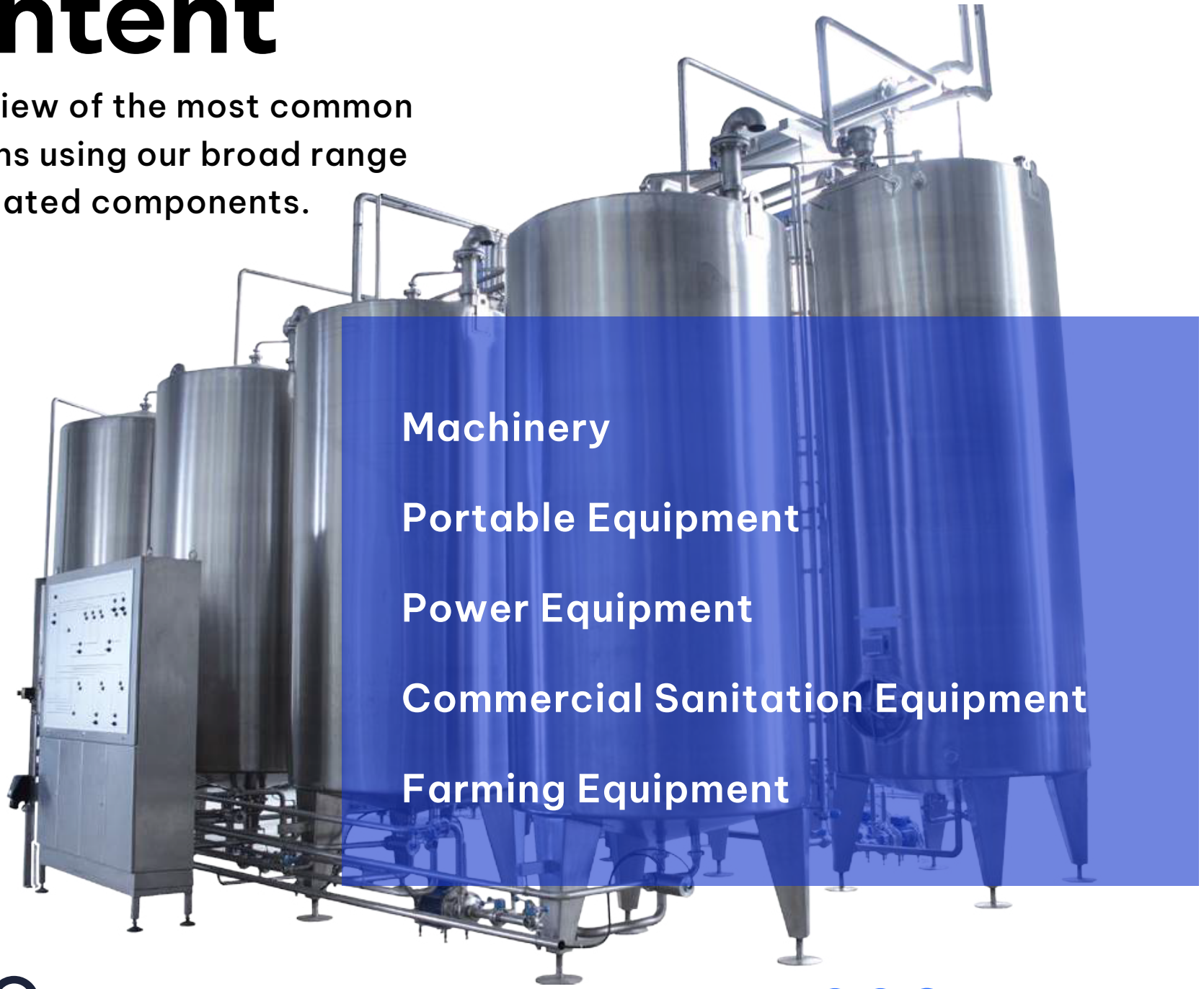


Industrial Applications



Content

An overview of the most common design-ins using our broad range of illuminated components.



Machinery

Portable Equipment

Power Equipment

Commercial Sanitation Equipment

Farming Equipment

Machinery

Machinery

Dirt, vibration, moisture, extreme temps and even shock. Industrial controls and human-machine interfaces need industrial-strength protection from the harshest working conditions. That's why our ruggedized indicators are made to withstand anything the job throws at them while ensuring safety is never an afterthought.

Our comprehensive portfolio of illumination components delivers the accuracy and reliability required for a broad host of industrial applications. From superior protection from dust, moisture, and EMI, to lenses that provide maximum daytime visibility, we have the products you need to ensure constant visual output clarity in the most challenging working environments.

Whether you need a custom or standardized solution, we have the expertise to make sure your indicators are built to withstand severe abuse while enhancing visual communication. We also offer heavy-duty efficiencies in production and assembly, too, with flexible voltage options for many products.

Applications

- Compact Packaging Equipment
- Demagnetizer
- Industrial Sand Blaster
- Portable Construction and Industrial Heating System
- Industrial Automated Saws
- Token Machine
- Welding & Drilling Machine
- Industrial Grade Printer



CNX722 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Ø0.87" (22mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads, screw block, tab terminals
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant

PML50 Harsh Environment Series



IP67 Panel Mount Indicator

- IP67 Ruggedized LED indicator
- Unique optical low profile lens
- Design for harsh and outdoor environments
- Ø0.668" (17.5mm) mounting hole
- Flex volt technology: 5V to 28V
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Bi-color: red/green, red/blue, red/yellow, yellow/green, yellow/blue
- IP67 rated
- Vibration resistant
- RoHS compliant

CNX718 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Ø0.688" (17.47mm) mounting hole
- Voltage: 5VDC, 12VDC, 28VDC, 120VAC
- Wire leads, tab terminals
- LED long life
- Colors: red, amber, green, white
- Dome-shaped lens
- Water clear lens with Fresnel pattern
- Wide viewing angle
- Protect panels entry of dust and moisture
- Vibration resistant
- RoHS compliant

FLXR Series



Flexible Light Pipe

- Flexible optical fiber light pipe
- Designed for harsh environments
- Fits 0.400" (10.1mm) hole
- Anti-vandal Ios profile
- ESD protection
- Robust anodized aluminum body
- Wide viewing angle
- Available in different lens colors
- Resistant to shock and vibration
- Moisture sealed
- RoHS Compliant

LCS Series



Moisture Sealed Light Pipe

- Designed for wet environments
- Rigid light pipe
- Fits 0.312" (8mm) panel mounting hole
- 3mm and 5mm LEDs recommended
- 180° viewing angle
- 6 different lengths from 0.320" to 1.320"
- Colors: red, amber, green, blue, yellow, clear
- Clear acrylic optical grade light pipe
- Polycarbonate colored lens
- w/ lockwasher & retainer nut
- Moisture sealed
- RoHS Compliant

CNX482 Series



Anti-vandalism Panel Mount Indicator

- High intensity LED indicator
- Ø0.399" (10.1mm) mounting hole
- Voltage: 3VDC
- Wire leads
- LED long life
- Colors: blue, green, red, white, yellow
- Fresnel lens
- Black or clear anodized aluminum bodies
- Vibration resistant
- RoHS compliant

CNX714 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Designed for harsh and outdoor environments
- Ø0.551" (14mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant

1092 Series



Panel Mount Indicator

- High intensity LED indicator
- Ø0.50" (12.7mm) mounting hole
- Voltage: 12VDC, 28VDC, 120VAC
- Wire leads, quick connect tab terminals
- LED long life
- Direct sunlight visibility
- Colors: red, green, amber
- Four different lens options
- Snap-fit
- "D" mounting hole prevent any rotation
- Optional O-ring
- RoHS compliant



Portable Machines

Portable Machines

Today's toughest jobs move fast and require machines that can do more than keep up. Our diverse selection of die-hard illumination components helps operators make more informed decisions in the field, the warehouse, or anywhere the job takes them.

From control panels for aircraft diesel generators that need sophisticated EMI shielding to portable MIG welder indicators, our products are built to withstand dirt, oil, vibration, high temperatures, and hostile conditions that portable machines face every day. And with full brightness in milliseconds, there's no delay between job performance and dependable illumination, no matter how fast the day's work is moving.

Voltage, speed, pressure – when measurement is the task at hand, accuracy must be achieved through clear visual communication with operators at all times and all viewing angles.



Whether it's the industry's thinnest seven-segment display or lenses that enable maximum visibility during operation, our products do more than deliver safe and consistent operation – they simplify installation and maintenance with snap-fit components and long operating life.

Applications

- Aircraft Diesel Generator
- Flow Meters
- Portable Construction and Industrial Heating System
- Portable MIG Welder
- Torque Wrench
- Temperature Control System
- Moisture Meters
- Industrial Scales

CNX722 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Ø0.87" (22mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads, screw block, tab terminals
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant

PML50 Harsh Environment Series



IP67 Panel Mount Indicator

- IP67 Ruggedized LED indicator
- Unique optical low profile lens
- Design for harsh and outdoor environments
- Ø0.668" (17.5mm) mounting hole
- Flex volt technology: 5V to 28V
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Bi-color: red/green, red/blue, red/yellow, yellow/green, yellow/blue
- IP67 rated
- Vibration resistant
- RoHS compliant

CNX718 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Ø0.688" (17.47mm) mounting hole
- Voltage: 5VDC, 12VDC, 28VDC, 120VAC
- Wire leads, tab terminals
- LED long life
- Colors: red, amber, green, white
- Dome-shaped lens
- Water clear lens with Fresnel pattern
- Wide viewing angle
- Protect panels entry of dust and moisture
- Vibration resistant
- RoHS compliant

LFB Series



3mm Press Fit Light Pipe

- Diffused Rigid light pipe
- Low profile press fit diffused light pipe
- Crushable ribs simplifies installation
- Uniform brightness
- Frosted surface provides a soft glow
- 120° viewing angle
- Works with through hole and SMD LEDs
- Fits 0.116" (3mm) panel mounting hole
- Enables flush panel design opportunities
- Available lengths from 0.125" to 1.000"
- Clear polycarbonate UL 94-V0
- Vibration resistant with optional retainer ring
- RoHS Compliant

LPC Series



4mm Low Profile Light Pipe

- Low profile fresnel light pipe
- Rigid light pipe
- Uniform brightness
- Available with or without crushable ribs
- Light pipe is secured to the display panel
- Works with through hole and SMD LEDs
- Fits 0.171" (4.3mm) panel mounting hole
- 160° viewing angle
- Available lengths from 0.200" to 2.000"
- Unique near flush design
- Clear acrylic optical grade
- Vibration resistant with optional retainer ring
- RoHS Compliant

LFC Series



5mm Press Fit Light Pipe

- Diffused Rigid light pipe
- Low profile press fit diffused light pipe
- Crushable ribs simplifies installation
- Uniform brightness
- Frosted surface provides a soft glow
- 120° viewing angle
- Works with through hole and SMD LEDs
- Fits 0.156" (4mm) panel mounting hole
- Enables flush panel design opportunities
- Available lengths from 0.125" to 1.000"
- Clear polycarbonate UL 94-V0
- Vibration resistant with optional retainer ring
- RoHS Compliant

CNX714 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Designed for harsh and outdoor environments
- Ø0.551" (14mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant

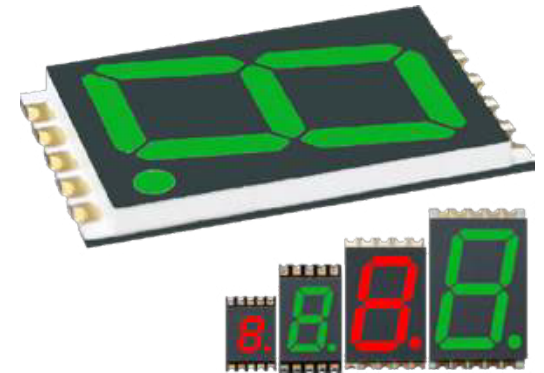
1092 Series



Panel Mount Indicator

- High intensity LED indicator
- Ø0.50" (12.7mm) mounting hole
- Voltage: 12VDC, 28VDC, 120VAC
- Wire leads, quick connect tab terminals
- LED long life
- Direct sunlight visibility
- Colors: red, green, amber
- Four different lens options
- Snap -Fit
- "D" mounting hole prevent any rotation
- Optional o-ring
- RoHS compliant

DSM Series



Ultra Thin LED Display

- 7-segment single digit display
- Exclusive patented technology
- High brightness and high contrast
- Excellent character appearance
- Available for reverse mounting configuration
- Available in 4 different sizes
- Available in red and pure green
- Support SMT manufacturing
- RoHS compliant

Energy Equipment



Energy Equipment

When power is part of the equation, operator safety is always the solution. The control panels that communicate power equipment operation must be rugged enough to perform consistently in the real dirty real world. That's why our selection of illuminated products is built with the features you care about most, including the highest level of daytime visibility and IP ratings to help withstand exposure to dirt, oil, water, vibration, extreme temperatures, and anything else that comes at them.

From flexible voltage options to fast-pitch threads that reduce assembly time and cost, our illuminated components allow for better control of power systems, and ultimately safer operation.

Our solutions have been used in applications including machines that harness the sun's power and nuclear power control systems that monitor the most volatile resources available. We deliver components in a variety of configurations and options to maximize performance and energy efficiency, all while ensuring visual communications between operator and machine maintain accuracy.

Let us customize an innovative product for you, or optimize your design with a standardized and superior illumination solution.

Applications

- Automated Industrial Controls
- Electric Manual Motor Starter
- Instrument Control Panel
- Solar Power Inverters
- Nuclear Power Control Room Indicators
- On-board Charger Application
- Solar Panel Control Box
- Power Factor Correction Capacitor
- Power Generator Controller
- Wind Turbine Vibration Monitoring System

FLX Series



Flexible Light Pipe

- Flexible board mount light pipe
- Fiber optic with optical grade acrylic lens
- Fits 0.250" (6.35mm) panel mounting hole
- Works with through hole and SMD LEDs
- Variations of board mounting available
- Optional color lens and shape available
- Available lengths from 2.0" to 12.0"
- Vibration resistant with optional retainer ring
- RoHS Compliant

LFB Series



3mm Press Fit Light Pipe

- Diffused Rigid light pipe
- Low profile press fit diffused light pipe
- Crushable ribs simplifies installation
- Uniform brightness
- Frosted surface provides a soft glow
- 120° viewing angle
- Works with through hole and SMD LEDs
- Fits 0.116" (3mm) panel mounting hole
- Enable flush panel design opportunities
- Available lengths from 0.125" to 1.000"
- Clear polycarbonate UL 94-V0
- Vibration resistant with optional retainer ring
- RoHS Compliant

LFC Series



5mm Press Fit Light Pipe

- Diffused Rigid light pipe
- Low profile press fit diffused light pipe
- Crushable ribs simplifies installation
- Uniform brightness
- Frosted surface provides a soft glow
- 120° viewing angle
- Works with through hole and SMD LEDs
- Fits 0.156" (4mm) panel mounting hole
- Enables flush panel design opportunities
- Available lengths from 0.125" to 1.000"
- Clear polycarbonate UL 94-V0
- Vibration resistant with optional retainer ring
- RoHS Compliant

Commercial Sanitation Equipment

Commercial Sanitation Equipment

Bacteria, viruses, mold and even worse. Eliminating these dangers that can't even be seen with the naked eye is a pretty big – and challenging – job.

When public safety is at stake, the tools and equipment used to help remove potentially deadly toxins cannot phone it in. So we ensure every one of our illumination components is rugged enough to meet the stringent demands of the job – from IP-rated products designed to withstand shock, vibration and moisture to lenses that enable high visibility at any angle or time of day.

Our broad selection of indicators provides the reliability and safe operation for any sanitation application. EMI shielding. Flexible voltage. IP rating. Full brightness in a matter of microseconds. You name it, we'll deliver a custom or standard solutions that meets your unique specifications.



Applications

- Commercial Ozone Generator
- Residential and Commercial Pool System Controls
- Ultrasonic Cleaner
- Robot Pool Cleaning Equipment
- Water Quality Systems
- Pressure Washers

PCL22 Series



Pilot Light

- Advanced light diffusion technology
- LED pilot light
- Ø0.88" (22mm) mounting hole
- Voltage: 12VDC, 24VDC
- Diffused Translucent Lens
- Direct sunlight visibility
- Single color: red, green, yellow, blue, white
- Bi-color: red/green
- IP65 rated
- Vibration resistant
- RoHS compliant



CNX722 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Design for harsh and outdoor environments
- Ø0.87" (22mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads, screw block, tab terminals
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant



PML50 Harsh Environment Series



IP67 Panel Mount Indicator

- IP67 Ruggedized LED indicator
- Unique optical low profile lens
- Design for harsh and outdoor environments
- Ø0.668" (17.5mm) mounting hole
- Flex volt technology: 5V to 28V
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Bi-color: red/green, red/blue, red/yellow, yellow/green, yellow/blue
- IP67 rated
- Vibration resistant
- RoHS compliant

CNX714 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Designed for harsh and outdoor environments
- Ø0.551" (14mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant

CNX482 Series



Anti-vandalism Panel Mount Indicator

- High intensity LED indicator
- Ø0.399" (10.1mm) mounting hole
- Voltage: 3VDC
- Wire leads
- LED long life
- Colors: blue, green, red, white, yellow
- Fresnel lens
- Black or clear anodized aluminum bodies
- Vibration resistant
- RoHS compliant

Farming Equipment

Farming Equipment

Consumer trends. Water shortages. Rising costs. Modern farmers must find ways to maximize efficiencies while fighting against the forces that are stacked up against them. And the indicators that guide the operation of their equipment must be tough enough to withstand powerful forces, too, like harsh chemicals, moisture, shock, vibration, dirt and extreme temperatures.

Our rugged products are designed for superior reliability and performance in the harshest of conditions, without falling short when it comes to optimal visibility during daytime operation.

From dairy processing and climate monitoring equipment to other hardworking farming machines, our team specifies solutions that meet aggressive safety and design requirements while maintaining efficient operation and longer bulb life. We even provide flexible voltage options that open up a wide range of design possibilities.

Choose from standard or custom solutions that ensure maximum light detection and enhanced operation. Whatever the job demands, we're here with the expertise to deliver the right illumination technology for any farming or agricultural application.



Applications

- Climate and Production Monitoring Equipment
- Dairy Processing Equipment
- Cattle Feeding Machines
- Industrial Wood Chippers
- Potato Farming Equipment
- Livestock Heaters

PML50 Harsh Environment Series



IP67 Panel Mount Indicator

- IP67 Ruggedized LED indicator
- Unique optical low profile lens
- Design for harsh and outdoor environments
- Ø0.668" (17.5mm) mounting hole
- Flex volt technology: 5V to 28V
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Bi-color: red/green, red/blue, red/yellow, yellow/green, yellow/blue
- IP67 rated
- Vibration resistant
- RoHS compliant



CNX722 Series



Ruggedized Panel Mount Indicator

- Ruggedized LED indicator
- Design for harsh and outdoor environments
- Ø0.87" (22mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads, screw block, tab terminals
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant

CNX714 Series



Ruggedized Panel Mount Indicator

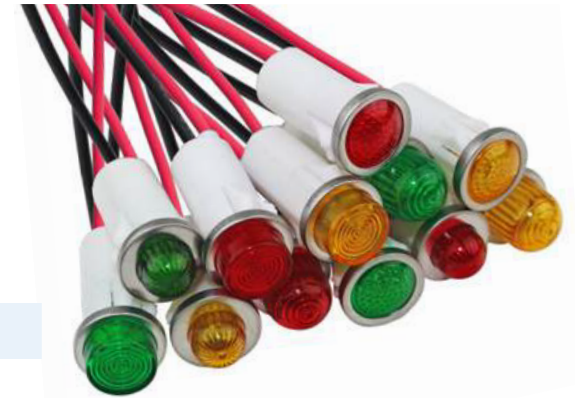
- Ruggedized LED indicator
- Designed for harsh and outdoor environments
- Ø0.551" (14mm) mounting hole
- Flex volt technology: 5V to 28V, 120VAC
- Wire leads
- LED long life
- Direct sunlight visibility
- Colors: red, green, yellow, blue, white
- Fast pitch threads enable quick installation
- IP67 rated
- Vibration resistant
- RoHS compliant

1092 Series



Panel Mount Indicator

- High intensity LED indicator
- Ø0.50" (12.7mm) mounting hole
- Voltage: 12VDC, 28VDC, 120VAC
- Wire leads, quick connect tab terminals
- LED long life
- Direct sunlight visibility
- Colors: red, green, amber
- Four different lens options
- Snap-fit
- "D" mounting hole prevent any rotation
- Optional O-ring
- RoHS compliant





VCC is a recognized global leader for illuminated electronic components including the aerospace, food service, people movers, transportation, medical, telecom and industrial markets.

Providing custom and standard solutions with superior design engineering expertise, excellent customer service, and the broadest product line in the industry VCC proudly exceed user experiences.

From simple to more complex human machine interface systems, VCC excels at designing, testing and manufacturing custom light indication solutions, in less time and on budget.

Start a Conversation with
One of our Applications
Engineers Today!