

THE FUTURE OF FARMING, LIT RIGHT



HORTICULTURE LIGHTING SOLUTIONS

Horticultural lighting isn't just about bright ideas—it's about making installations easy, reliable, and cost-effective. Whether you're managing low-current direct current (DC) for light engines or high-power alternating current (AC) connections for drivers, you need connectors that work seamlessly.

In large commercial applications, time is money. Harsh-environment interconnects ensure quick, reliable setups that keep the lights on every time. And no system is complete without a control system. TE Connectivity (TE) relays, filters, and interconnects help ensure your lighting system provides the right light to keep plants healthy from start to finish.

Partner with TE to power your horticultural lighting and controls—because great lighting means great growth!

WITHIN THE HORTICULTURE INDUSTRY, THREE DISTINCT SECTORS EMERGE, EACH WITH UNIQUE REQUIREMENTS AND CHALLENGES:



GREENHOUSES

Designers need LED lighting that controls the length of the day and the growing season to create the perfect atmosphere for plant growth.



INDOOR GROWING/CULTIVATING

Growers need flexible and precise LED grow light solutions to help ensure that crops receive the desired light spectrums needed to thrive year-round.



VERTICAL FARMING

Designers need LED grow lights that will control cultivation through the plant canopy as well as control the macro and microclimate.

DESIGN CHALLENGES			SOLUTIONS
	FIXTURE CONNECT	 Designing compact, easy-to-install connectors that can meet space and performance needs Ensuring seamless integration with new and retrofit LED fixtures Mitigating EMI issues affecting LED driver performance Providing ingress protection (IP)-rated, sealed solutions for harsh environments 	 Circular Plastic Connectors NECTOR S Connectors NECTOR T Connectors CoolSplice Quick Connect Connectors Power Line Filters
	LIGHT ENGINE INTERCONNECTS	 Integrating light engines into modern horticultural lighting systems Designing low-profile interconnects for surface mount and through-hole board configurations Enabling faster, more efficient, and reliable connections 	 Micro MATE-N-LOK Connectors SlimSeal Mini Headers BUCHANAN WireMate Connectors
	DRIVER INTERCONNECTS	 Supporting both board-to-board and wire-to-board configurations for design flexibility Ensuring easy installation and secure mating for streamlined assembly Providing durable, high-reliability connections in demanding environments 	 SlimSeal Miniature Connectors LIGHT-N-LOK Connectors Modular Terminal Blocks Push Grip Connectors
	WIRE MANAGEMENT	 Balancing low-profile, easy-install components with durability and performance Ensuring seamless integration into new and existing LED fixtures 	Cable GlandsTerminal & Splices

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FIXTURE CONNECT SOLUTIONS

Discover TE Connectivity's fixture assembly solutions, engineered for seamless integration and reliable performance in horticulture lighting. Our sealed NECTOR pluggable connectors, rugged circular plastic connectors, and power line filters provide durable, easy-to-install solutions that can withstand harsh environments while helping ensure efficient power distribution.



NECTOR T Connectors

- Field-installable with screw-type termination or crimp contacts for flexible installation
- 3-way and 4-way power-splitting connectors, expanding design layout options and enabling fast, plug-and-play installations
- Allows pre-terminated cables with lower labor / installation costs
- Built to withstand harsh outdoor conditions, including UV and sulfur exposure, water and dust ingression with IP-rated 67/68 sealed protection



NECTOR S Connectors

- Designed for electrical installation and excellent for applications where a power connection and coupling between lights are needed
- Plug-and-play principle with upgraded modular wiring connectors
- Energy-efficient products that integrate into low- and high-voltage solid-state lighting (SSL) luminaires
- · Easy-to-install solution that fits in 8 mm opening

Circular Plastic Connectors



- High-performance connectors with sealing capabilities for harsh environments
- Lightweight, all-plastic and metal-shell connectors feature quick connect/disconnect, thread assist, and positive dent coupling for easy installation and maintenance
- Polarized design helps ensure proper mating, with removable contacts and a replaceable coupling ring for reliability and field repairs

FIXTURE CONNECT SOLUTIONS



CoolSplice Quick Connect Splice

- Easy installation using independent push button termination for left and right side of connector
- Save installation time and eliminate the need to pre-strip wires with insulation displacement technology (IDC)
- Option to enable a water-resistant solution with an IPX8-rated splice
- Terminates 22 AWG to 12 AWG solid and stranded wire

CORCOM Power Line Filters

- Specially designed for lighting devices, fluorescent lamp and related lighting ballasts
- Suitable for applications requiring 277 VAC or 277 VDC
- CORCOM lighting EMI filters include FBL (standard performance, 300V, 50°C, up to 20A)
- High-performance options: FB (277V, 90°C, up to 5A) and FBH (480V, 90°C, up to 5A)



LIGHT ENGINE INTERCONNECTS

TE Connectivity's flexible interconnect solutions seamlessly integrate light engines into modern horticulture lighting fixtures. Our low-profile surface mount and through-hole board interconnects help enable faster manufacturing, more reliable connections, and enhanced durability to withstand the demanding environments of indoor growing.



Micro MATE-N-LOK Connectors

- Wire-to-wire and wire-to-board pin and receptacle connector system (panel mount or free hanging versions)
- Can help enhance wire harness assembly efficiency with a lead-in funnel for easy alignment and cycling
- Available in low profile design (<4.7 mm)
- Discrete wire interconnect available in 2-12 position single row and 2-24 position dual row



SlimSeal Mini Headers

- IP67-rated sealed connector that can withstand harsh environments, making it suitable for outdoor lighting and other high-humidity applications
- Positive latching helps prevent inadvertent un-mating
- Pre-assembled seals reduce assembly time
- Available in 2 and 3 positions for 22 18 AWG (0.33 0.75 mm2) wire sizes

BUCHANAN WireMate Connectors



- Modular technology enables design flexibility
- Easy and fast installation with poke-in contact feature
- Color configurations provide easy identification
- Low-profile PCB connectors with up to six positions and a durable, tool-free poke-in mechanism for reliable reuse

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DRIVER INTERCONNECTS

Deliver design flexibility and ease of use and user-friendly interconnects designed to reliably connect to a driver.



Miniature SlimSeal Connectors

- IP67-rated sealed connector that can withstand harsh environments, making it suitable for outdoor lighting and other high-humidity applications
- Positive latching helps prevent inadvertent un-mating
- Pre-assembled seals reduce assembly time
- Available in 2 and 3 positions for 22 18 AWG (0.33 0.75 mm2) wire sizes



Push Grip Insulated Wire Connectors

- Available in 2-5 positions for 22-12 AWG solid or stranded wire
- Save installation time with poke-in wire technology and tool-free conductor termination
- Designed for factory or field installations with test slots for voltage testing
- Compact, color-coded design with low insertion force for easy identification and fast connections
- Transparent housing to visually verify fully seated wire conductor insertion depth



LIGHT-N-LOK Connectors

- Tool-less wire-to-wire compact connector design and easy field installation with poke-in contact feature
- Hot pluggable version available that provides a safe, pluggable disconnect for hot and neutral ballast wiring that meets the National Electrical Code and Canadian Electrical Code requirements
- Accepting 22 AWG 18 AWG (0.33 mm2 0.75mm2) wire sizes



Modular Terminal Blocks

- One-piece Modular screwless series allow for easy wire insertion without need for special tooling
- High-density compact design with multiple pitch options for space-saving and design flexibility
- Variety of color configurations makes identification easy
- Vertical poke-in series eliminates the need to hand solder or fixture and wave-solder wires directly to printed circuit board



Twist Splice Wire Connectors

- Tool-less twist grip termination for easy and fast installation
- Color-coded to industry standards for size selection from 22 8 AWG
- Terminate multiple wire gauges into single splice
- Square-wire spring threads provide a positive "Grip" to help ensure quick and tight secure connections
- Tough thermoplastic, UL 94 V-2 flame-retardant shell at 105° C (221° F) operating temperature



WIRE MANAGEMENT

Engineered for improved manufacturability and faster time to market.



Cable Glands

- Broad offering for multiple applications, including electromagnetic compatibility (EMC), vibration resistance, hygienic, and industrial solutions
- Specialized glands and accessories from RJ45, ventilation and drain plugs, to multiple entry cable plates
- High ingress protection up to IP68 & IP69K
- Time-saving option with snap-in mounting



Labels and Makers

- Full solution system of labels, markers, printers, software, and ribbons
- Heat-shrinkable cable marker sleeves available in a wide variety of configurations, colors and sizes
- Printable tag markers are flat, non-adhesive labels used either pre- or post-termination
- Standard labels are a cost-effective way to identify wires, wire bundles, and equipment



Terminals and Splices

- Designed for multiple applications including high temperature (650° C) or high voltage rating (1200V), and fluid/corrosion/vibration resistance
- Uninsulated or color-coded insulation material for quick identification
- · Engineered for reliable connections with manual, semi-automatic, and automatic tooling options



Cable Ties

- Versatile, capable of securing a wide array of items beyond cables and wires.
- Simple to use simply slip the pointed end into the ratchet case and pull tight
- Cost-effective, a significant factor in their widespread

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