



NEW PRODUCT APPLICATION GUIDE 2024, VOLUME 2



NEW PRODUCT APPLICATION GUIDE

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5G & WIRELESS EQUIPMENT



TE's broad product portfolio helps address future requirements of wireless networks with a range of next-generation connector and cable assembly product offerings.



A. PROSIG WI-FI 6E/7 DIRECTIONAL PANEL ANTENNAS

ProSig 2.4-2.5, 4.9-6.0, 6.0-7.125 GHz tri-band directional array panel antennas are designed for Wi-Fi 6E/7 wireless network systems.

AEROSPACE

TE Connectivity's solutions help solve the aviation industry's space, weight, reliability and efficiency challenges.



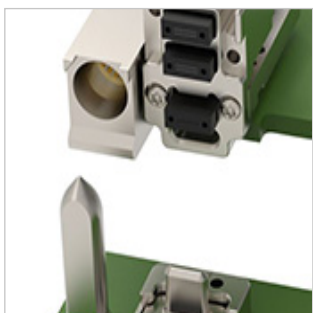
A. NANORF 75 OHM OPTICAL HYBRID MODULE

The 75 ohm NanoRF optical hybrid module offers advanced performance by providing high speed and density in a small form factor.



B. STANDARD AND MINIATURE CABLE TIE ADHESIVE MOUNT BRACKETS

These lightweight brackets offer faster installation with recommended adhesive, while maintaining structural integrity by eliminating drilled holes and modifications.



C. VITA 66 STYLE D, 3 MT OPTICAL MODULES

The ruggedized Optical Backplane VITA 66.5 interconnect system provides a high-density, high-bandwidth, blind-mate optical interconnect in a backplane/daughtercard configuration.

APPLIANCES

TE designs solutions to meet the daily demands of home appliances. We can help you enhance the reliability of your connections, improve the efficiency of both your assembly operations and your appliances, and much more.



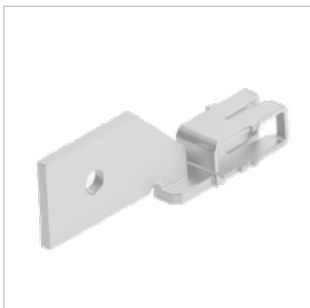
A. COMPACT SEAL SPLICE

The compact seal splice is an excellent solution for wire extensions in harsh conditions that saves installation time and cost.



B. POWER KEY 5.0 SURFACE MOUNT TECHNOLOGY CONNECTOR

The Power Key 5.0 SMT header supports automated pick-and-place processes. Supports PCB potting and it is available in multiple colors and keying options.



C. MAG-MATE TERMINALS FOR ALUMINUM MAGNET WIRE

Aluminum magnet MAG-MATE terminals were developed to support the adoption of aluminum as a light-weight / low-cost alternative to copper.

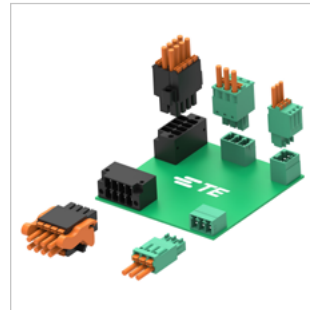
AUTOMATION & CONTROL

Controls for next-generation industrial automation. From human-machine interfaces to distributed factory controls, we can help you increase productivity and safety on the floor and throughout production.



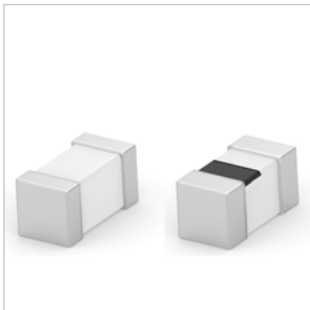
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B. PUSH-IN PCB TERMINAL BLOCK CONNECTORS

Designed for high-density signal and power applications in control systems. Reduces installation labor time by up to 80% compared to standard screw-clamp terminations.



C. AUTOMOTIVE GRADE MULTILAYER CHIP INDUCTOR - TYPE 3655 SERIES

TE Connectivity's automotive-grade 3655 series multilayer chip inductors feature a low-loss ceramic structure and high-conductivity metal electrodes.



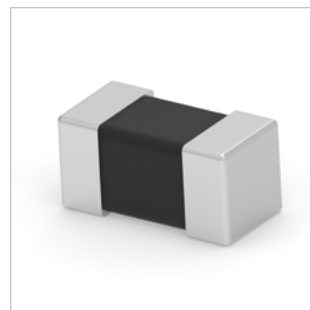
D. ERNI MICROCON CONNECTOR

The dual-row MicroCon connector with a 0.8 mm pitch is ideal for industrial applications like drives, robots, automation controls, and warehouse equipment due to its high pin count.



E. INDUSTRIAL RJ45 MODULAR JACKS

TE Connectivity's (TE) RJ45 family of modular jacks without magnetics complements the portfolio of RJ45 connectors by adding an entry level set of products that can be used together with our discrete magnetics line.



F. AUTOMOTIVE GRADE MULTILAYER CHIP BEADS - TYPE BMC-Q SERIES

TE Connectivity (TE) introduces its automotive grade multilayer chip bead inductors. The BMC-Q series are designed with a monolithic inorganic material construction.



G. EASY-LOCK PLASTIC SIGNAL CONNECTORS (PSC)

TE Connectivity (TE) easy locking plastic signal connectors are designed based on the easy application concept. They support up to 5A current for reliable connections in industrial applications.



H. HPC 350A BESS CONNECTOR

The TE Connectivity (TE) HPC Series focuses on Battery Energy Storage System (BESS) to provide the higher safety and reliability solution with one pole 350A/1500V high current connector.



I. HQ-4/4/6 HYBRID INSERT WITH CAT 5 ETHERNET

TE Connectivity (TE) introduces the new HQ-4/4/6 insert with a hybrid design. The hybrid Insert provides power, signal and Ethernet data transmission functionality.

AUTOMOTIVE

TE Connectivity (TE) is the leading provider for innovative end-to-end automotive connector portfolio of solution for body and chassis systems, convenience applications, driver information, infotainment solutions, miniaturization solutions, motor and powertrain applications, and safety and security systems.



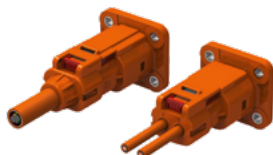
A. FAKRA AUTOMOTIVE CONNECTOR SYSTEMS

Simplified stamped and formed terminals offering lower mating forces for fully automated cable assembly increasing levels of robustness for harsh automotive environments.



B. MATE-AX MINIATURIZED AUTOMOTIVE COAXIAL CONNECTORS

Miniaturized automotive coaxial connector system providing advanced automotive data transmission performance, supporting up to 9GHz.



C. AMP+ HVA 280 HIGH-VOLTAGE INTERCONNECTION SYSTEM

For Low- to Medium-Current Applications. Offers thousands of design possibilities, routing flexibility, and manufacturing efficiencies.



D. AMP+ HVA 630 HIGH-VOLTAGE INTERCONNECTION SYSTEM

Advanced high-voltage protection for an electric vehicle's onboard charging system. Available in 2 and 5-pin options with integrated internal HVIL.



E. AMP+ CHARGING INLET 32 SERIES

Convenient at-home/ at-work AC charging solution for EVs. Integrated sensing and actuation, providing touch-safe operation & charging state feedback.



F. HC-STAK 25 HIGH-VOLTAGE INTERCONNECTION SYSTEM

Designed to provide a safe and reliable connection between the HV battery and inverter or the power distribution and e-motor.

AUTOMOTIVE



G. EVC 175 MAIN CONTACTOR

Ideal for applications such as hybrid, full-battery electric, fuel-cell vehicles & DC battery charging systems. Features a continuous current of 175A



H. EVC 250 MAIN CONTACTOR

For hybrid, full-electric, fuel-cell vehicles & on-board charging systems. Has high-performance arc suppressing magnets to control switching arc.



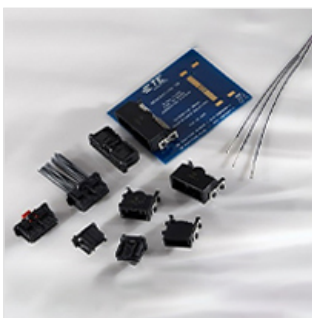
I. TIMER CONNECTOR SYSTEM

Suitable for high position connections up to 121 positions with a lever to provide easy mating. A time-proven, robust mature product family serving numerous automotive applications through design flexibility, electrical performance.



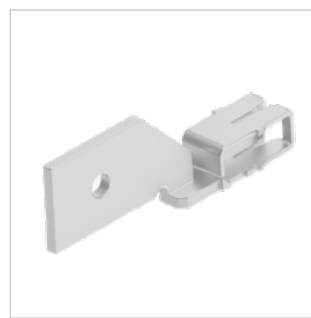
J. MQS INTERCONNECTION SYSTEMS

Offer high packing density, robust construction and highest functional requirements. Fulfill all requirements for a contact system suitable for use in automobiles and cover a wide range of application sectors in both waterproof and non-waterproof areas.



K. GENERATION 50 MINIATURIZED AUTOMOTIVE CONNECTOR SYSTEM

Small size. Big advantages. The TE Connectivity (TE) Generation 50 connector portfolio offers both size and weight savings while satisfying the USCAR-2 environmental and mechanical requirement for 0.50 mm systems.



L. MAG-MATE TERMINALS FOR ALUMINUM MAGNET WIRE

Aluminum Magnet Wire MAG-MATE Terminals were developed to support the adoption of aluminum as a light-weight / low-cost alternative to copper.

AUTOMOTIVE



M. ETHERNET CABLE STRIPPING & CRIMPING MACHINE (ESM-10)

ESM-10 boosts efficiency, quality, and cost-effectiveness for ethernet cable processing with loading, cutting, stripping, crimping & inspection.

COMMERCIAL & INDUSTRIAL VEHICLES

TE delivers reliable connectivity products designed to withstand harsh environmental conditions for on and off-highway vehicles and recreational transportation.



A. HIGH POWER CHARGING INLETS

Support charging up to 500A continuous to reduce downtime and maximize productivity in equipment that operates in harsh environments and has longer lifetimes.



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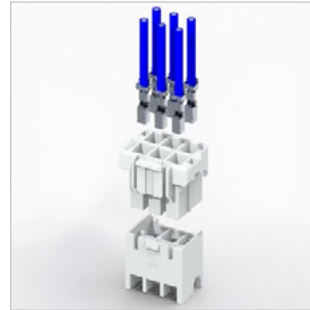
CONNECTED HOME

With a broad range of connectivity and sensor solutions for smart home appliances and devices, lighting, HVAC, security, and more, TE is the ideal partner to help you bring your products to market fast.



A. COMPACT SEAL SPLICE

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B. POWER KEY 5.0 SURFACE MOUNT TECHNOLOGY CONNECTOR

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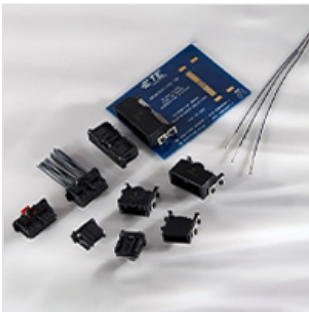
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DATA CENTERS & ARTIFICIAL INTELLIGENCE

Our solutions for data center infrastructure enable exceptional data storage and data processing services delivered through data centers built upon an agile, secure and reliable infrastructure, operating at the highest levels of efficiency and availability.



A. STACKED QSFP 112G SMT CONNECTOR & CAGE

TE Connectivity's (TE) QSFP 112G products extend Stacked QSFP 112G SMT Connector & Cage to support aggregate data rates of 400Gbps (gigabits per second) with superior signal integrity and meet 112G PAM-4.



B. LGA 4710 SOCKET AND HARDWARE

TE Connectivity's (TE) LGA 4710 sockets for next-generation server processors adopt the same form-factor as for LGA 4677 and provide more connections between the main board and the processor.



C. AMPLIMITE D SUBMINIATURE CABLE ASSEMBLIES

AMPLIMITE D-subminiature cable assemblies are part of the AMPLIMITE product line which is widely used by the electronics industry.

DEFENSE



Our portfolio of sub-assemblies features the latest in materials science and product design standards.



A. NANORF 75 OHM OPTICAL HYBRID MODULE

The 75 ohm NanoRF optical hybrid module offers advanced performance by providing high speed and density in a small form factor.



B. VITA 66 STYLE D, 3 MT OPTICAL MODULES

The Ruggedized Optical Backplane VITA 66.5 interconnect system provides a high-density, high-bandwidth, blind-mate optical interconnect in a backplane/daughtercard configuration.

E-MOBILITY

Our products cover the complete spectrum of EV energy transfer, providing safe, reliable, durable, and efficient electrical systems connectivity that meets the increased power ratings and higher thermal and vibration requirements.



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G. SEGMENTED RADIAL CRIMP (SRC) TECHNOLOGY SOLUTIONS

SRC-M OCTACRIMP & die sets offer segmented radial crimping for large wires, with SRC-A OCTACRIMP for mid-range wires in an HV-20 press.

INDUSTRIAL MACHINERY

TE's Industrial Machinery solutions provide the basis for flexible production — ensuring you are ready to meet the needs of the future head on.



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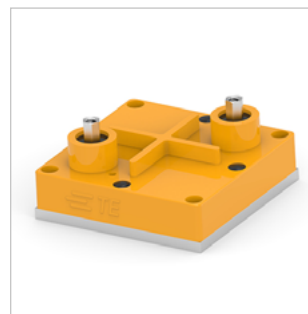
D. HIGH VOLTAGE DC CONTACTOR ECK 50B AND 100B SERIES

TE Connectivity (TE) introduces the ECK50B/100B high-voltage DC contactor series which is designed for control in new energy applications.



E. ALUMINIUM HOUSED POWER RESISTORS - TYPE HS SERIES

Aluminum Housed Power Resistors - Type HS Series are high-quality, stable wire-wound resistors designed for reliable performance, dissipating high power in limited spaces with low surface temperatures.



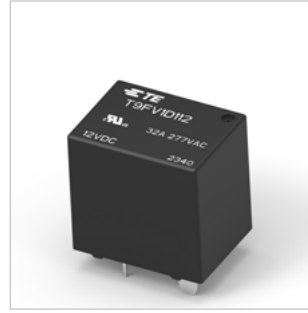
F. THICK FILM HIGH POWER RESISTORS - TYPE BDS SERIES

TE Connectivity (TE) introduces the high power version of our BDS thick film resistors that are able to deliver 1000 Watt and 2000 Watt power dissipation capability with an easy-mounting 76 mm x 76 mm case.



G. HIGH VOLTAGE DC CONTACTOR ECP 40B SERIES

TE Connectivity (TE)'s ECP40B series high-voltage DC contactor is designed for control in high voltage environments like battery energy storage system, solar inverters, and EV charging applications.



H. POWER PCB RELAY T9F SERIES

TE Connectivity (TE) introduces the T9F series 32 Amp miniature relays designed for generating control in the latest energy and power supply applications.



I. ALCOSWITCH 12 MM ANTI VANDAL FLUSH SWITCH

TE Connectivity (TE)'s new ALCOSWITCH Anti-Vandal Flush switch series is designed for security and reliability in a variety of panel mount industrial and building applications. the switch and allow for an easy user interface.



J. ALCOSWITCH LIMIT SWITCH - TYPE TLS SERIES

The ALCOSWITCH TLS Limit Switch Series from TE Connectivity offers durable, cost-effective position switches with various actuator styles and housing options.



K. ALCOSWITCH LED INDICATOR LIGHT AND BUZZER

TE Connectivity (TE)'s new ALCOSWITCH ILE (Indicator Light) and IBE (Buzzer) indicators are class leading LED and audible devices.



L. IOT WIRELESS PRESSURE SENSORS

IoT wireless pressure sensors with LoRaWAN and Bluetooth connectivity for monitoring, early fault detection, and downtime reduction.



M. IOT WIRELESS VIBRATION SENSORS

Wireless sensors are a key component for condition monitoring, enabling predictive maintenance, and helping to eliminate unscheduled downtime.



N. ETHERNET CABLE STRIPPING & CRIMPING MACHINE (ESM-10)

ESM-10 boosts efficiency, quality, and cost-effectiveness for ethernet cable processing with loading, cutting, stripping, crimping & inspection.

INTELLIGENT BUILDINGS

Solving your connectivity challenges in linking power and data throughout the building — from environmental and illumination controls, to safety, people flow, convenience, and service equipment.



A. POWER KEY 5.0 SURFACE MOUNT TECHNOLOGY CONNECTOR

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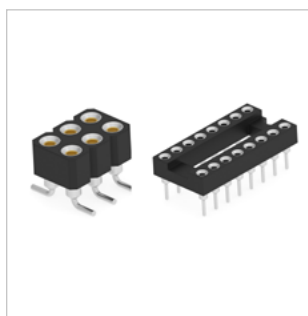
INTERNET OF THINGS (IoT) CONNECTIVITY

TE Connectivity's power and signal connector solutions are designed to help address your design challenges head-on to deliver the power you need for always-on connectivity.



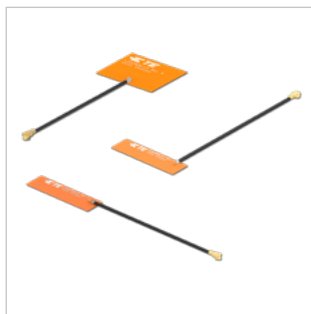
A. 450 MHZ LTE HELICAL ANTENNA SERIES

450 MHz helical antennas are compact, rugged, low-cost and easy to install. Designed for operations in the 450 MHz LTE bands (72, 73 & 31).



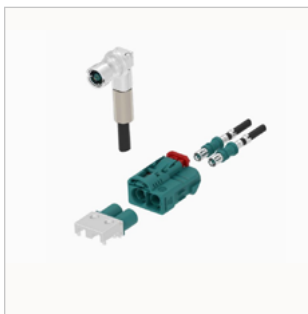
B. DIP SOCKETS AND SIP SOCKETS

TE Connectivity's (TE) Dual In-Line Package (DIP) sockets and Single In-Line Package (SIP) Sockets provide a separable electrical and mechanical connection between an electronic component and a printed circuit board (PCB).



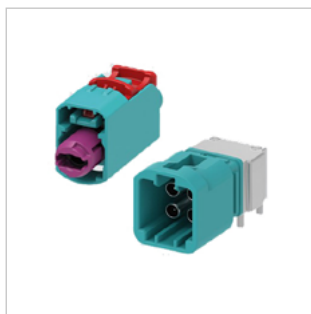
C. ISM 868/915 MHZ FPC ANTENNAS

ISM band 868/915 MHz FPC antennas for LoRaWAN and IoT applications address the growing demand for ISM antennas that utilize a single frequency.



D. FAKRA AUTOMOTIVE CONNECTOR SYSTEMS

Simplified stamped and formed terminals offering lower mating forces for fully automated cable assembly increasing levels of robustness for harsh automotive environments.



E. MATE-AX MINIATURIZED AUTOMOTIVE COAXIAL CONNECTORS

Miniaturized automotive coaxial connector system providing advanced automotive data transmission performance, supporting up to 9GHz.



F. HIGH DENSITY BNC CABLE ASSEMBLIES

High-density BNC cable assemblies expand our high-density BNC portfolio which is used in large scale video signal applications.

INTERNET OF THINGS (IoT) CONNECTIVITY



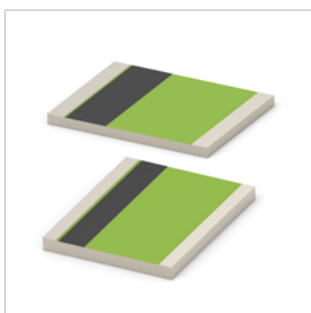
G. FLEXIBLE EMBEDDED L1/L5 GNSS ANTENNAS

The new Flexible Embedded L1/L5 GNSS Antennas address the growing demand for antennas in asset tracking and positioning applications.



H. RF CONNECTORS PRODUCT REFRESH

In a continuing effort to meet demand, TE is reintroducing an assortment of some of our most requested BNC, SMA, and SMB connectors & adapters.



I. ULTRA WIDE BAND (UWB) CERAMIC CHIP ANTENNAS

Providing secure and reliable communication (up to 50x faster than GPS), UWB ceramic chip antennas can transmit large amounts of data over a wide frequency spectrum.



J. SPLATCH 5G/LTE CELLULAR WIDEBAND AND L1/L5 MICRO SPLATCH GNSS CHIP ANTENNAS

New Splatch 5G/LTE chip antennas for IoT applications & L1/L5 micro Splatch GNSS chip antennas for GPS, Galileo, Beidou, NavIC & QZSS systems.

MEDICAL TECHNOLOGIES

We provide top-tier engineering expertise and manufacturing excellence in the development of optimally engineered components and value-added sub-assemblies to support the production of life-saving medical devices used in interventional cardiology, surgery, imaging, in vitro diagnostics, and other medical specialties.



A. HIGH-RESOLUTION AIR BUBBLE DETECTOR AD-102

Designed to detect air-in-line (AIL) with an industry leading bubble resolution of 25% tubing inner diameter.



B. IOT WIRELESS VIBRATION SENSORS

Wireless sensors are a key component for condition monitoring, enabling predictive maintenance, and helping to eliminate unscheduled downtime.

OIL & GAS / MARINE



TE's electronic systems and components have withstood weather, corrosion and extreme temperatures to help keep commercial vessels, offshore platforms and military marine applications productive, safe, and dependable in tough operating environments.



A. IOT WIRELESS VIBRATION SENSORS

Wireless sensors are a key component for condition monitoring, enabling predictive maintenance, and helping to eliminate unscheduled downtime.



B. IOT WIRELESS PRESSURE SENSORS

IoT wireless pressure sensors with LoRaWAN and Bluetooth connectivity for monitoring, early fault detection, and downtime reduction.

PERSONAL ELECTRONICS & WEARABLE TECHNOLOGY

We design and manufacture a broad range of innovative connectivity solutions for personal communications, wearable tech, and mobile and computing devices to help you address today's market challenges.



A. USB TYPE-C CHARGE-ONLY RECEPTACLES

USB Type-C charge-only receptacles are a simplified version of USB Type-C that use the familiar Type-C form factor for power-only applications.

Connect With Us

We make it easy to connect with our experts and are ready to provide all the support you need. Visit te.com/support to chat with a Product Information Specialist.

te.com

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