



DRONE APPLICATIONS

INNOVATIVE SOLUTIONS

TE Connectivity (TE) is your drones solution provider for electromechanical and electronic components. This solutions guide will help you select the required components with easy access to additional online information at te.com. TE's quick-to-install and industry-proven innovative product solutions will help you develop cutting-edge drone technology.



DESIGN NAVIGATOR

PRODUCT CATEGORY	APPLICATIONS			Maximum Current Rating	Maximum Voltage Rating	Temperature Range (°C)	Protection from EMI/RFI Noise	Durable in Harsh Environments	Space Saving Design	Wire-to-Wire	Wire-to-Board	Board-to-Board
	Consumer / Recreational	Military	Commercial									
CAMERA VIDEO	1	2	3									
High Sensitivity Piezo Film Sensor Contact Microphone	●	●	●	N/A	N/A	+5 to 60	●	●	●			
SD Card Slot (Push Push)	●			0.5	30AC	-25 to 85	●	●	●			
COMMUNICATIONS												
Board Level Shielding	●		●	N/A	N/A	Withstands reflow and solder temperature	●		●			
Microminiature RF Antenna	●		●	1	30	-30 to 85	●		●			
Ultraminiature Coax Connector & Cable Assembly Series	●	●		N/A	60	-40 to 90			●		●	
MMCX Microminiature Snap-On Connector Series	●	●		N/A	170	-55 to 155		●	●		●	●
Standard Antenna	●		●	N/A	N/A	-40 to 85		●	●			
Switching Coax Connector	●		●	N/A	N/A	-40 to 85	●	●	●			
Multi-position Backplane RF Module		●		varies	200	-55 to 105	●	●	●	●	●	●
Raychem Cheminax Cable	●	●	●	N/A	300	-65 to 200	●	●	●			
Fine Pitch Board-to-Board Connector	●		●	0.3 per PN	50V	-40 to 85			●			●
High Performance Interconnect Wire-to-Board	●		●	1-3	250V	-25 to 105					●	
M.2 Board-to-Board Connector	●		●	0.5A (per pin)	50VAC (per pin)	-40 to 80			●			●
COMPUTING												
AMP CT and Mini CT Connector	●		●	1 to 4	125	-40 to 105			●	●	●	
CeeLok FAS-T Nano Connector		●		1 amp/contact	500	Max. 125	●	●	●	●	●	
CeeLok FAS-X Connector		●		5A/contact	1500	Max. 175	●	●	●	●	●	
Inverted Thru Board Interconnect	●			7	600	-40 to 105					●	●
Fortis Zd Connector		●		1.5A/contact	250	-65 to 125	●	●	●			●
Flat Flexible Cable (FFC)	●		●	1	50	-40 to 85			●	●	●	
Board-to-Flexible Printed Circuit Connector	●		●	0.3 per PN	30V	-55 to 85	●		●			●
Flexible Printed Cable (FPC)	●		●	1	200AC	-40 to 85			●	●	●	
Free Height Board-to-Board Connector	●		●	0.5	100AC	-40 to 85	●		●			●
IDC Connector	●	●	●	20	250	-40 to 110	●	●	●	●	●	
Mezalog Mezzanine Connectors (VITA 61)		●		1.5A/contact	250	-55 to 125		●	●			●
Micro-MaTch Connector	●	●	●	1.5A	100	-40 to 105		●	●		●	●
MULTIGIG RT 2-R (VITA 46 VPX) Connector		●		1.0 A/signal contact 11 A/ power wafer contact	200	-55 to 125		●	●			●
AMP-LATCH Ribbon Cable Connector	●		●	1	250	-65 to 105		●			●	
SD Card Slot (Push Push)	●			0.5	30AC	-25 to 85	●	●	●			
SIM Card Slot (Push Push)	●		●	1	30	-30 to 85	●		●			
Spring Finger	●	●	●	4	50V	-40 to 85	●	●	●			●
DDR3 Socket	●		●	Signal application only	25 volts AC	-55 to 155			●			●
DDR4 Socket	●		●	0.75	25 volts AC	-55 to 105			●			●
LGA Socket	●		●	0.5	12	-25 to 100			●			●
PGA Socket	●		●	3	1000	-55 to 105			●			●
Micro MATE-N-LOK Connector	●		●	5	250	-40 to 150			●	●	●	
MOTOR												
High Performance Interconnect Wire-to-Board	●		●	1-3	250V	-25 to 105					●	
Remote Input/Output Terminal System (RITS) Connector	●	●		3A	32V	-30 to 75			●	●	●	
AMPLIVAR Terminals & Splices	●		●	N/A	N/A	-65 to 150			●	●		
MAG-MATE Terminals	●		●	N/A	N/A	-65 to 150			●	●	●	
POWER TRIPLE LOCK Connector	●		●	20	600	-55 to 105 HT 150°		●		●	●	
Power Key Connector	●		●	10	300	-30 to 105			●		●	
Economy Power II Connector	●		●	11	250 VAC 600 VAC	-25 to 105					●	
Power Double Lock Connector	●		●	14	300	-30 to 150			●	●	●	
POWER & SWITCHING												
Mobile Battery	●			5	250	-30 to 70		●	●			●
PC Battery	●		●	15	250	-30 to 70		●	●			●
USB Type-C Connector	●	●	●	5	20	-30 to 85	●	●	●		●	
CII AC and DC Mil-Aero Relays		●		5-50	230VAC 28VDC	-70 to 125	●	●	●			
Hartman Contactor		●		varies	230VAC	-55 to 71	●	●	●			
Kilovac High Voltage Relay		●		600	1000VDC	-55 to 85	●	●	●			
K Series Contactor		●		600	28VDC	-55 to 85	●	●	●			
Aluminum and Phenolic Knobs	●	●	●	N/A	N/A	N/A		●				
USB Connector	●			2	30	-55 to 85	●	●	●		●	
Micro USB Connector	●			1.8	30	-55 to 85	●	●	●		●	
Rectangular DC Jack Connector	●	●	●	10.7	25	-40 to 85	●	●	●		●	
DIP Switches	●	●	●	100mA	24VDC	-30 to 85		●	●		●	
Tactile Switches	●	●	●	50mA	24VDC	-35 to 105		●	●			●
Toggle Switches	●	●	●	20	250AC/DC	-30 to 85				●	●	●
LIGHTING												
IDC SSL Connector	●	●	●	8	400	-40 to 105		●	●		●	
High Performance Interconnect Wire-to-Board Connector	●		●	1-3	250V	-25 to 105					●	
Miniature Hermaphroditic Blade and Receptacle Connectors	●		●	3	300	-40 to 105		●	●			●
Modular Releasable Poke-In Connector	●	●	●	5-9A	400	-40 to 125			●		●	

PRODUCT CATEGORY

APPLICATIONS

Consumer /
Recreational

Military

Commercial

Maximum Current
Rating

Maximum Voltage
Rating

Temperature
Range (°C)

Protection from
EMI/RFI Noise

Durable in Harsh
Environments

Space Saving
Design

Wire-to-Wire

Wire-to-Board

Board-to-Board

SENSING

	1	2	3									
Magnetic Encoder - 12C OR Analog		●		10-30	3-5.5	-25 to 85		●	●			
Altimeter - MS5607-02BA	●	●	●	N/A	N/A	-40 to 85		●	●			
Altimeter - MS5611-01BS	●	●	●	N/A	N/A	-40 to 85		●	●			
Altimeter - MS8607-02BA01	●	●	●	N/A	N/A	-40 to 85		●	●			
Altimeter - MS5637-02BA03	●	●	●	N/A	N/A	-40 to 85			●			
HTU21D Humidity Temp Sensor		●	●	N/A	N/A	-40 to 125		●	●			
TSYS02P Digital Temp Sensor		●	●	N/A	N/A	-40 to 125		●	●			
Rotary Displacement Sensor		●	●	N/A	N/A	-40 to 125		●				
Linear Displacement Sensor		●	●	N/A	N/A	-40 to 125		●				
Thermopile Sensor		●	●	N/A	N/A	-20 to 300						
MS5525DSO Pressure Sensor		●		N/A	N/A	-40 to 125			●			
IS Rated Submersible Transducer		●		N/A	N/A	-40 to 80	●	●	●			
PLCD Position Sensors		●		N/A	N/A	Max. 150C		●				
Wheel Speed Sensors		●		N/A	N/A	-40 to 125		●				
Liquid Level Switches		●		N/A	N/A	-40 to 125		●				
FN1010 Force Load Cell		●		N/A	N/A	-20 to 80						
RVDT Position Sensor		●		N/A	N/A	-40 to 150	●	●				
LVDT Position Sensor		●		N/A	N/A	-20 to 150		●				
16mm Digital Output Pressure Sensor		●		N/A	N/A	-40 to 125						
Precision Aligned Triaxial DC Accelerometer		●		N/A	N/A	-40 to 85		●	●			
Charge Mode Accelerometer		●		N/A	N/A	-54 to 300		●				
EPRB-1 Miniature Pressure Transducer		●		N/A	N/A	-40 to 150		●	●			
MS4515 Pressure Transducer		●		N/A	N/A	-10 to 85		●	●			
MS4525 Pressure Transducer		●		N/A	N/A	-25 to 105		●	●			
NTC Thermistor Sensor		●		N/A	N/A	-40 to 150						
Thin Film Temperature Sensor		●		N/A	N/A	-50 to 600		●	●			
M12 Position Sensor		●		N/A	N/A	-55 to 150	●	●	●			
MS5212-HM Pressure Sensor	●	●	●	N/A	N/A	-40 to 125		●	●			

INTERCONNECT

Raychem Adapters		●		varies	varies	varies	●	●		●	●	
Polamco Rectangular		●		varies	varies	varies	●	●		●	●	
Raychem HexaShield EMI Adapters		●		varies	varies	varies	●	●		●	●	
Tinel-Lock		●		varies	varies	varies	●	●		●	●	
Heat Shrinkable Molded Parts	●	●	●	varies	varies	up to 200	●	●	●			
Military Grade Heat Shrink Tubing	●	●	●	varies	varies	up to 200		●	●			
High-Speed Copper Cable	●	●	●	N/A	300	-65 to 200	●	●	●			
Strato-Therm Terminals		●		varies	varies	up to 649		●		●	●	
PIDG Terminals or Terminals and Disconnects (Military)		●		varies	300	up to 105		●		●	●	
SolderSleeve Shield Terminator		●		varies	2kVrms	-55 to 260		●	●	●	●	
DEUTSCH DBAS Series Connector		●		varies	2300V	-55 to 200	●	●				
DEUTSCH Wildcat Connector Series		●		3-5A	1000	-65 to 175	●	●	●	●	●	
DEUTSCH 38999 Connector		●		23 amps	1250VDC 900Vrms	-65 to 200	●	●	●	●	●	
DEUTSCH 369 Connector		●	●	5A	1500	-55 to 175		●	●	●	●	
DEUTSCH CTJ AS 81714 Series II		●		138	1500	-65 to 200		●	●		●	
DEUTSCH DMC Connector		●		90	1500	-55 to 175	●	●	●	●	●	
DEUTSCH ABC Plated and In-Line Connector		●		600	5-400A	-65 to 175	●	●			●	
Raychem SHF-60 Power Cable	●	●	●	N/A	1000	-60 to 260		●	●			
82 Wire Flexline		●		varies	600	-65 to 200		●	●			
Identification Products	●	●	●	N/A	N/A	-55 to 125		●				
Raychem SPEC 55 Wire and Cable		●		varies	1000	-65 to 200		●	●			
Heat Shrink Tubing - Single Wall	●	●	●	N/A	N/A	-30 to 135		●	●			
Mil-spec 1553 Databus		●		Digital signal meets Mil Std 1553b	Digital signal meets Mil Std 1553b	150	●	●	●		●	
ZHD Labels	●	●	●	N/A	N/A	-55 to 125		●				
39029 Military Grade Contacts		●		varies	2kVrms	150	●	●	●			
AMPLIMITE Military Subminiature D Connector	●	●	●	5	250	-55 to 125		●			●	●
TTP Labels	●			N/A	N/A	-55 to 125						
DEUTSCH Autosport Connector	●	●		3-20	750-1800	-55 to 175		●	●	●	●	
Heat Shrink Tubing - Dual Wall	●	●	●	N/A	N/A	-40 to 110		●	●			
AMPMODU 50/50 Grid Connector Family	●	●	●	0.5 amps per contact	30AC	-65 to 105			●		●	●
AMPMODU System 50 Connector Family	●	●	●	0.5 to 1 amp per contact	30AC	-65 to 105			●		●	●
AMPMODU Mod II Breakaway Header	●	●	●	3 amps	250AC	-65 to 105					●	●
AMPMODU MTE Connector	●	●	●	3 amps	267AC	-65 to 105				●	●	
Braid / TFI Kits	●	●	●	varies	varies	up to 150	●	●	●			
Custom Design Multicore Cables	●	●	●	N/A	3600	-65 to 200	●	●	●			



POWER

- Battery
- Power Connector

LIGHTING

- Power Connector



COMMUNICATIONS

- Antennas
- Signal
- Remote Control
- Input/Output

COMPUTING

- Board
- Sockets
- Memory



MOTOR

- Power Connector

SENSING

- Position
- Humidity
- Temperature
- Pressure



INTERCONNECT

- Wire and Cable
- Identification
- Connectors

CAMERA

- Camera
- Memory



FEATURED PRODUCTS



AMP CT and Mini CT Connectors

1

- Offer design flexibility with IDC and crimp termination methods
- Provide PC board relief-retention with kinked connector design



Miniature Hermaphroditic Blade and Receptacle Connectors w/ Selective Gold Plating

1 2 3

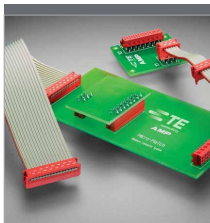
- Provides a robust printed circuit board-to-board power connection in high vibration environments
- Achieve design versatility with a small footprint interconnection



CeeLok FAS-T Nano Connectors

2

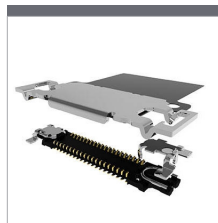
- Achieve up to 10 GbE rates for high-speed transmission of data
- Improve signal integrity through uniform cross talk cancellation with T-shaped pin pattern



Micro-MaTch Connectors

1 2 3

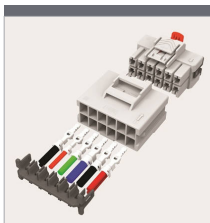
- Prevent fretting corrosion and allow for longer-lasting connection with contact spring design
- Absorb vibration with high contact force system



Fine Pitch Board-to-Board Connectors

1 3

- Offer a smaller centerline and lower mating height, plus industry first EMI shielded board-to-FPC connectors
- Offer a super narrow body with a sufficient pick and place area



POWER TRIPLE LOCK Connectors

1 3

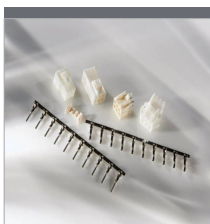
- Reliability and ease of assembly also comes with keying and color combinations, no lance contact design features, low mating forces, and various temperature and flammability



Micro MATE-N-LOK Connectors

1 3

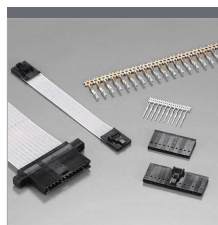
- Maximize board space with low profile single and dual row, vertical and right angle configurations
- Polarized housings help prevent mismatching, positive latching prevents unmating



Power Double Lock Connectors

1 2 3

- Enhance reliability with inner-locking system, and double-lock plate ensuring full contact insertion
- Available in multiple colors and polarizing ribs on housing for ease of installation



FFC / FPC Connectors

1

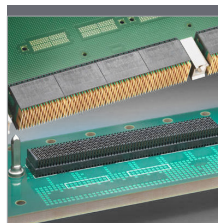
- Save space and meet cabling needs with multiple centerline options
- Support smaller and lighter designs with mixed signal and low power routing



USB Type-C Connectors

1 2 3

- Save valuable board real-estate with one of the smallest available dual row SMT footprints
- Enable easy, reliable mating with reversible design



Multigig RT 2-R (VITA 46 VPX)

2

- Support high levels of shock and vibration with a quad-redundant contact system
- Offer a robust "pinless" interface and a modular, lightweight connector system



High Performance Relays

1 2 3

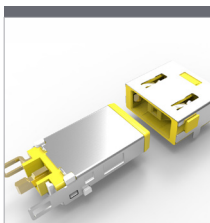
- Withstand extreme environments with high performance designs
- Offer consistently high contact pressure, reduced bounce and less arching, resulting in extended contact life



Spring Fingers

1 2 3

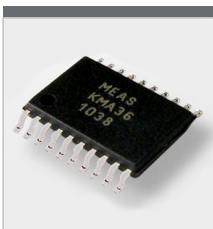
- Eliminate the cost of specialized equipment with a design using standard equipment for soldering and pick-and-place
- Gain design versatility with a small, scalable footprint



Rectangular DC Jack Connectors

2

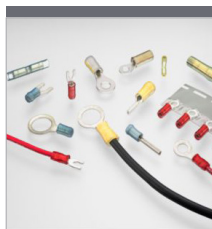
- Provide power to battery operated devices with up to 25V and 10.7A max ratings in a USB-sized connector
- Enable design flexibility with surface mount, cable and DIP mount options



Magnetic Encoder - I2C or Analog

2

- Ensure maximum freedom with a wide range of configuration parameters
- Offer magnetoresistive element along with analog-to-digital converter and signal processing in a small TSSOP package



PIDG Terminals and Disconnects (Military)

2

- Provide maximum contact and tensile strength after crimping with serrations in the crimp barrel
- Offer circumferential insulation support and strain relief for uniform reliability in difficult circuit environments with specially designed copper sleeve



Altimeter-MS8607-02BA01

1 2 3

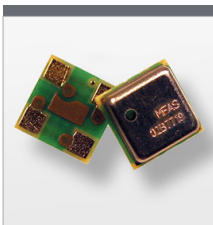
- Provide all-in-one environmental physical measurements for pressure, humidity and temperature (PHT)
- Offer a solution ideal for when ultra-low power consumption, high PHT accuracy and compactness are critical



DEUTSCH 38999 Connectors

2

- Offer many choices in shell sizes, materials, inserts, filtering and EMI protection, and environmental sealing
- Provide high density layouts with up to 187 data connections and power contacts rated up to 23A



Altimeter-MS5637-02BA03

1 2 3

- Provide a precise digital 24-bit pressure and temperature value
- Offer different operation modes that allow the user to optimize for conversion speed and current consumption



ZHD Labels

1 2 3

- Offer a solution that is both low fire hazard and diesel resistant
- Help save time and cost by decreasing set-up and change-over frequency



Rotary Displacement Sensors

2 3

- Make absolute position measurements from 1/8th to 200 turns and provide industry standard 4-20mA and 0-10V analog outputs
- Offer ease of mounting, an optional mounting bracket and maintain position information even during power loss



Modular Releasable Poke-In Connectors

1 2 3

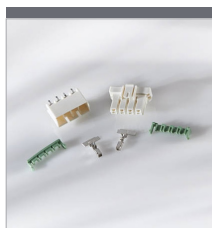
- Allow for repeatable, tool-less wire insertion and removal
- Save space with low profile, surface mount design



Thin Film Temperature Sensors

2

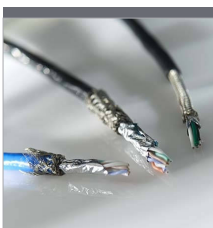
- Offer a solution for fast and precise feedback control systems with a low time constant
- Guarantee high long term stability with use of platinum as a resistive material



Power Key Connectors

1 3

- Optimize contact seating and proper mating to the PCB header
- Protect levers and prevent wire tangling with built-in walls, and friendly to PCB potting process



High Speed Copper Cable

1 2 3

- Offer excellent signal integrity with stable performance in extreme conditions
- Lower total installed costs with straightforward installation and compatibility with numerous TE products



Military Harnessing Tubing

1 2 3

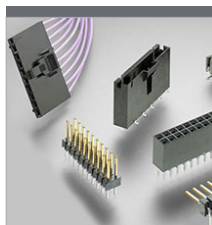
- Survive exposure to temperatures in excess in 200°C
- Offer excellent insulation while resisting fluids, heat and chemicals



Heat Shrink Tubing

1 2 3

- Provide dependable insulation, mechanical protection and strain relief with aesthetic appeal
- Design for extreme high or low temperature environments



AMPMODU Connectors

1 2 3

- Achieve high vibration performance and reliability with a wide variety of signal interconnects to meet your needs
- Ideal interconnect system with large product families and application possibilities

LET'S CONNECT

TE Connectivity (TE) brings you electromechanical and electronic components that drive design solutions. Whether you are designing a consumer, commercial, or military drone, this solution guide will help you select the required components with easy access to additional online information through te.com. With our wide variety of products and superior design capabilities, you will find the right match for your unique application.

Technical Support

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Austria	+43 1-9056-0	India	+86 400-820-6015	Russia	+74 95-790-790-2200
Belgium	+31 73-6246999	Ireland	+1 800-882-391	Slovakia	+42 02-720-11102
Brazil	+55 11-2103-6000	Italy	+39 011-4012111	Slovenia	+38 615-602-132
China	+86 400-820-6015	Japan	+044-844-8052	South Africa	+97 150-457-0806
Czech Republic	+42 02-7201-1103	Korea	+02-3415-4607	Spain	+34 932-910-330
Denmark	+46 8-5072-5000	Latvia	+37 2-6778-673	Sweden	+46 8-5072-5000
Estonia	+37 2677-8673	Lithuania	+37 037426900	Switzerland	+41 71-447-0447
Finland	+46 8-5072-5000	Luxembourg	+31 73-6246999	Taiwan	+86 400-820-6015
France	+33 1-34-20-8686	Netherlands	+31 73-6246999	Turkey	+90 212-282-6053
Germany	+49 6151-607-1999	New Zealand	+86 400-820-6015	United Kingdom	+44 0800-267666
Greece	+97 1-4-347-0226	Norway	+46 8-5072-5000	United States of America	800-522-6752
Holland	+31 73-6246999	Poland	+48 22-4576750		

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Raychem, Cheminax, AMP, CeeLok FAS-T, CeeLok FAS-X, Fortis Zd, Mezalok, MULTIGIG RT, AMP-LATCH, MATE-N-LOK, Micro-MaTch, POWER TRIPLE LOCK, Hartman, Kilovac, Polamco, HexaShield, Tinel, Strato-Therm, SolderSleeve, Flexline, DEUTSCH, AMPLIMITE, AMPMODU, TE Connectivity, TE, TE connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

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Document No. 1-1773896-2

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