

HARWIN

CONNECT TECHNOLOGY
WITH CONFIDENCE



HIGH RELIABILITY
WITH SUPREME
PERFORMANCE



INNOVATIVE
DESIGNS FOR
EASY ASSEMBLY



DEPENDABLE
CONNECTIVITY
ACROSS THE BOARD

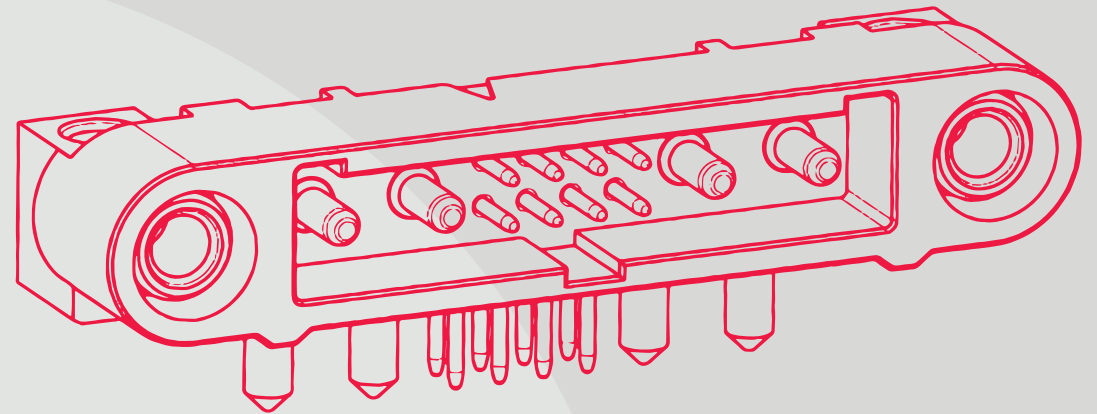
HRI
RANGE

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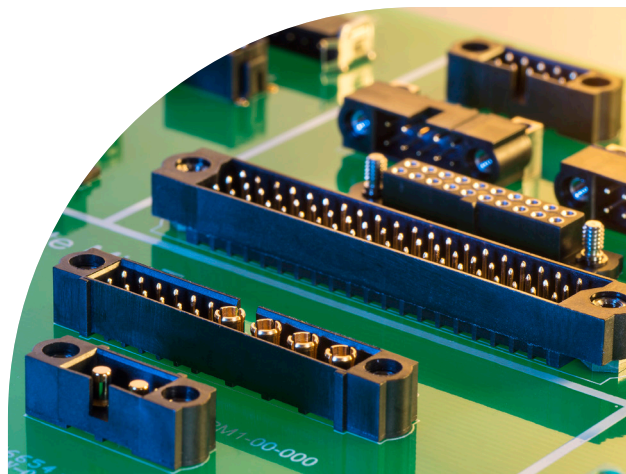
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PRODUCT SPEC SHEETS

HRI



PRODUCT SPEC SHEETS - 



DATAMATE



KEY FEATURES

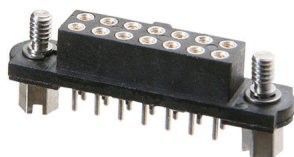
- Rugged and compact connector designs with proven track record
- 4-finger Beryllium Copper contact with gold finish – ensuring signal integrity under extreme conditions
- Highly reliable COTS alternative choice for military applications
- Full design flexibility – SMT and Throughboard, cable components or full cable assemblies
- Latches or Jackscrews for vibration/shock resilience and cable-to-board strain relief

SPECIFICATIONS	APPLICATIONS	DESIGN ENVIRONMENT
Up to 3.3A per signal contact Up to 40A per power contact Up to 6GHz, 50Ω (coax)	Aviation: Power control systems, in-flight infotainment and in-cabin services, navigation and flight systems	High vibration and shock
2mm / .079" pitch (signal) 4mm / .157" pitch (power or coax)	UAVs and eVTOL: Power distribution, guidance and navigation, auxiliary and payload power	Extreme temperatures
-55°C to +125°C	Space: Satellites and CubeSats, power management, navigation & communications, launch systems, payload interfaces	Harsh environment
Vibration: 10G for 6 hours	Defense & Security: Rugged vehicle electronics, servo controls, radar/tracking, data & telecoms, targeting systems, robotics	Safety critical
Shock: 100G for 6ms	Motorsport: Sensors and telemetry, navigation, ERS management	Low outgassing requirements
Durability: 500 mating cycles	Energy: Oil & Gas, renewable energy equipment	Long service life
	Medical: Diagnostics, instrumentation, monitoring, ventilators	

PRODUCT SPEC SHEETS -

DATAMATE J-TEK

- Robust jackscrews for maximum security of connection
- Double Row: up to 50 signal contacts
- Triple Row: up to 96 signal contacts
- Polarized housings and fully shrouded contacts
- Wire Gauges: Female = 22 AWG, 24-28 AWG, 28-32 AWG; Male = 22 AWG, 24-28 AWG
- Plastic hoods for strain relief
- Lightweight metal backshells for RFI shielding and strain relief
- Ready-made Cable Assemblies



Vertical Jackscrew



Female Male

Horizontal Jackscrew



Male

Reverse Fix



Female Male

101Lok



Female Male

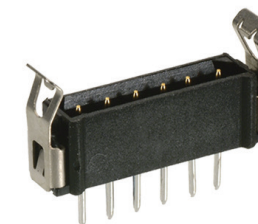
Guide Pin



Female

DATAMATE L-TEK

- Fast mating latched connectors with minimal footprint
- Single Row: up to 7 signal contacts (17 & 22 available in some styles)
- Double Row: up to 34 signal contacts
- Polarized housings and fully shrouded contacts
- Strain relief straps included with PCB mounted male horizontal connectors
- Wire Gauges: Female = 22 AWG, 24-28 AWG, 28-32 AWG; Male = 22 AWG, 24-28 AWG
- Plastic hoods for strain relief
- Ready-made Cable Assemblies



Locking Latch

- Positively locks connectors
- Requires a tool to un-mate (Z80-299)



No Latch

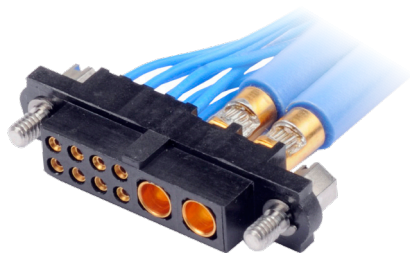
- Most commonly used on board-to-board assemblies



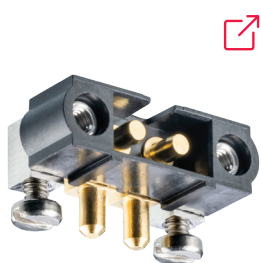
PRODUCT SPEC SHEETS - Datamate®

DATAMATE MIX-TEK

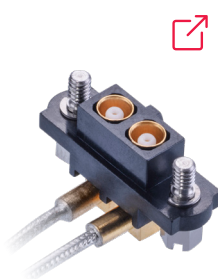
- High performance, mixed layout connector system
- Combines signal, power and/or coax into one connector housing
- Choice of power contacts: up to 20A or up to 40A
- Power/coax only: up to 12 contacts (equivalent to 48 signal)
- Polarized housings and fully shrouded contacts
- Wire Gauge: 10 AWG to 20 AWG (power); RG174, RG178, RG179 or RG316 (coax)
- Lightweight metal backshells for RFI shielding and strain relief
- Cable Assembly service available



Signal / Power



Power only



Coax only

DATAMATE T-CONTACT

- Increased current rating (up to 8.5A) for power on 2mm pitch signal layout
- 60% more contact wipe
- Compatible with Datamate J-Tek cable housings
- No change to mating male connectors required
- Single piece Beryllium Copper cable contact, 6 fingers, with 0.76-1.00 μ m (30-40 μ "") gold finish
- Wire Gauge: 22 AWG
- Increased mating cycle durability: 1,000 operations
- Improved vibration resistance: 40G for 6 hours

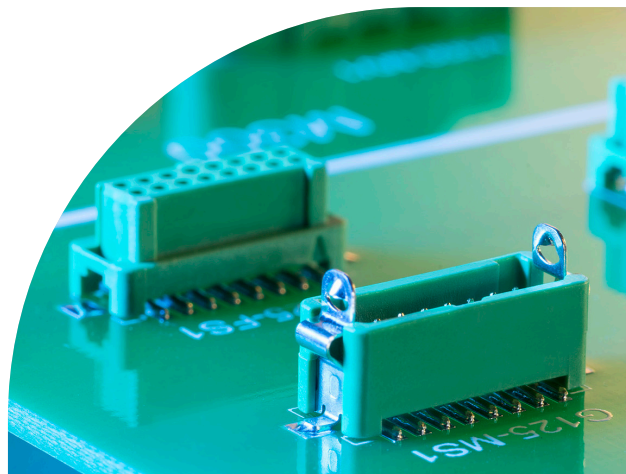


Pre-cabled contacts



Ready-made cable assemblies

PRODUCT SPEC SHEETS - 



GECKO

KEY FEATURES

- Miniature rugged and lightweight connectors; up to 45% space saving and up to 75% lighter than Micro-D connectors
- 4-finger single piece Beryllium Copper contact with gold finish – continuous signal integrity under extreme conditions
- Lightweight COTS alternative for space and unmanned flight
- Full design flexibility – SMT and Throughboard, cable components or full cable assemblies
- Latches or Screw-Loks for vibration/shock resilience and cable-to-board strain relief

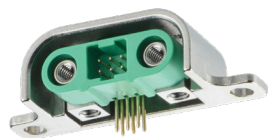
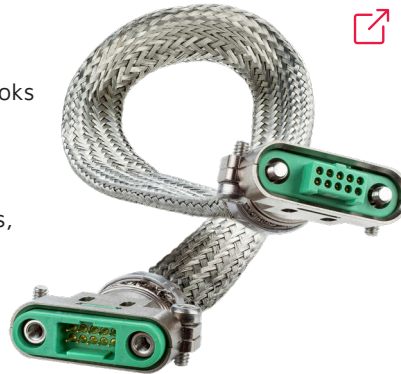


SPECIFICATIONS	APPLICATIONS	DESIGN ENVIRONMENT
Up to 2.8A per signal contact Up to 10A per power contact	Aviation: Flight systems, avionics controls, guidance systems, radar/tracking, communications, cabin interfaces	High vibration and shock
1.25mm / .049" pitch (signal)	UAVs and eVTOL: Battery management, control and flight, guidance and navigation, telemetry	Extreme temperatures
-65°C to +150°C	Space: Satellites and CubeSats, onboard computing, navigation & communications, launch systems, payloads	Harsh environment
Vibration: 20G for 6 hours	Defense & Security: handheld electronics, radar/tracking, data & telecoms, targeting systems, robotics	Safety critical
Shock: 100G for 6ms	Motorsport: Sensors and telemetry, navigation, ERS management	Low outgassing requirements
Durability: 1,000 mating cycles	Energy: Oil & Gas, renewable energy equipment	Space is restricted
	Medical: Diagnostics, instrumentation, monitoring, ventilators	Weight constraints

PRODUCT SPEC SHEETS -

GECKO-SL

- Mate-Before-Lock stainless steel screw-loks for fast & easy mating and maximum security of connection
- Front and rear panel mount cable options, board-mount fixings for strain relief
- Double Row: up to 50 signal contacts
- Polarized housings and fully shrouded contacts
- Wire Gauges: 26 AWG, 28-32 AWG
- Lightweight metal backshells for RFI shielding and strain relief
- Ready-made Cable Assemblies, including twisted pair and fully shielded options



Horizontal backshell



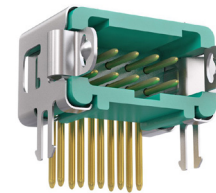
Vertical board-mount



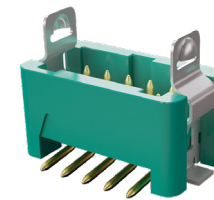
Backpotting Cavity

GECKO LATCH

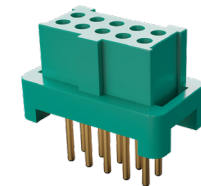
- Fast mating latched connectors with minimal footprint
- Retention barbs on Throughboard connectors, SMT solder hold-downs available
- Double Row: up to 50 signal contacts
- Polarized housings and fully shrouded contacts
- Wire Gauges: 26 AWG, 28-32 AWG
- Ready-made Cable Assemblies, including twisted pair options
- Additional tooling available to assist with unmating latches



Horizontal barbs



Vertical SMT hold-down

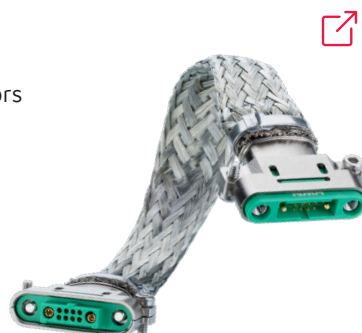


Female for latching

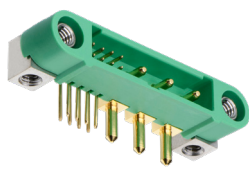
PRODUCT SPEC SHEETS -

GECKO-MT

- Smallest and lightest mixed layout connectors for high-reliability applications
- Screw-lok connector design with additional power contacts, up to 10A
- Front and rear panel mount cable options, board-mount fixings for strain relief
- Mate-Before-Lock stainless steel screw-loks for fast & easy mating and maximum security of connection
- Polarized housings and fully shrouded contacts
- Wire Gauges: 26 AWG, 28-32 AWG (signal), 18 AWG (power)
- Lightweight metal backshells for RFI shielding and strain relief
- Ready-made Cable Assemblies



Rear panel mount



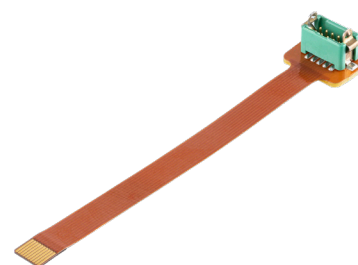
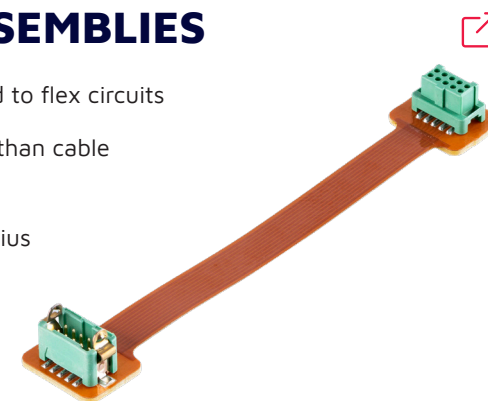
Horizontal board mount



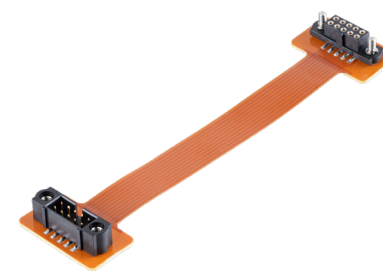
Vertical board mount

FLEX CIRCUIT ASSEMBLIES

- SMT connectors pre-assembled to flex circuits
- Smaller bend radius (1.85mm) than cable assemblies
- Improved dynamic bending radius (3.70mm)
- Right-angle connection
- Decreased mated height for improved above-the-PCB space
- Single and double ended options for both Gecko and Datamate ranges
- Ready-made for production use

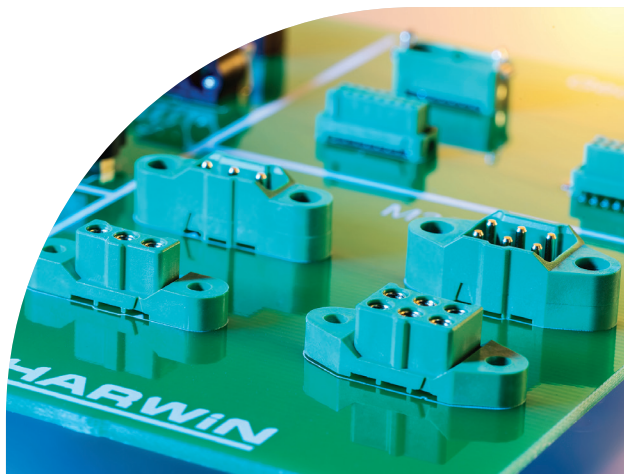


Single ended



Datamate J-Tek assemblies

PRODUCT SPEC SHEETS -



M300

KEY FEATURES

- Improved power-handling compared to Datamate signal connectors, but still saving on weight and space
- 4-finger Beryllium Copper contact with gold finish – ensuring signal integrity under extreme conditions
- Increased number of mating cycles and temperature range
- Recessed contacts help prevent damage during blind-mating
- Stainless steel jackscrews for vibration/shock resilience and cable-to-board strain relief
- Ready-made cable assemblies, or housings and contacts for do-it-yourself cabling; suitable for 18-20 AWG or 22 AWG wire gauges



SPECIFICATIONS	APPLICATIONS	DESIGN ENVIRONMENT
Up to 10A per contact	Aviation: Flight systems, avionics controls, guidance systems, radar/tracking, engine power management	High vibration and shock
3mm / .118" pitch	UAVs and eVTOL: Power distribution and management, control and flight, guidance and navigation, GPS and telemetry	Extreme temperatures
-65°C to +175°C	Space: Satellites and CubeSats, power management, navigation & communications, launch systems, radar and tracking	Harsh environment
Vibration: 10G for 12 hours	Defense & Security: Rugged vehicle electronics, servo controls, radar/tracking, targeting systems, robotics	Safety critical
Shock: 100G for 6ms	Motorsport: Navigation, GPS power management, ERS management	Low outgassing requirements
Durability: 1,000 mating cycles	Energy: Oil & Gas, renewable energy equipment	High level of mating cycles
3 contacts (single row) 6 or 10 contacts (double row)	Industrial: Robotics, automation, drives & controls	Power requirement with space constraints

PRODUCT SPEC SHEETS - **KONA**



KONA

KEY FEATURES

- Maximum power for resisting extreme conditions and physical damage
- 6-finger Beryllium Copper contact with gold finish – ensuring signal integrity under extreme conditions
- Mate-before-Lock thumbscrews for easy mating and unmating, vibration/shock resilience and cable-to-board strain relief
- Cable assemblies with 8 AWG wire ready-made, or housings & contacts for do-it-yourself cabling
- Individually shrouded connectors to avoid accidental touch and improved voltage rating



SPECIFICATIONS	APPLICATIONS	DESIGN ENVIRONMENT
Up to 60A per contact	Aviation: Power control systems, in-flight infotainment and in-cabin services, navigation and flight systems	High vibration and shock
3,000V AC maximum	UAVs and eVTOL: Power distribution, guidance and navigation, auxiliary and payload power	Extreme temperatures
8.5mm / .335" pitch	Space: Satellites and CubeSats, power management, launch systems, payload power and release systems	Harsh environment
-65°C to +150°C	Defense & Security: Rugged vehicle electronics, remote robotics drives, power distribution, robotics	Safety critical
Vibration: 20G for 12 hours	Motorsport and EVs: Battery control and monitoring systems, ERS control and supply, auxiliary system power, cabin systems	Low outgassing requirements
Shock: 100G for 6ms	Energy: Oil & Gas, renewable energy equipment	Very high current
Durability: 250 mating cycles	High-end Industrial: Power unit and control systems, robotics drives and servo controls, mining systems	High voltage
2, 3 or 4 contacts, single row		

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