

INTERCONNECT SOLUTIONS FOR MILITARY COMMUNICATIONS

www.mil-coninc.com



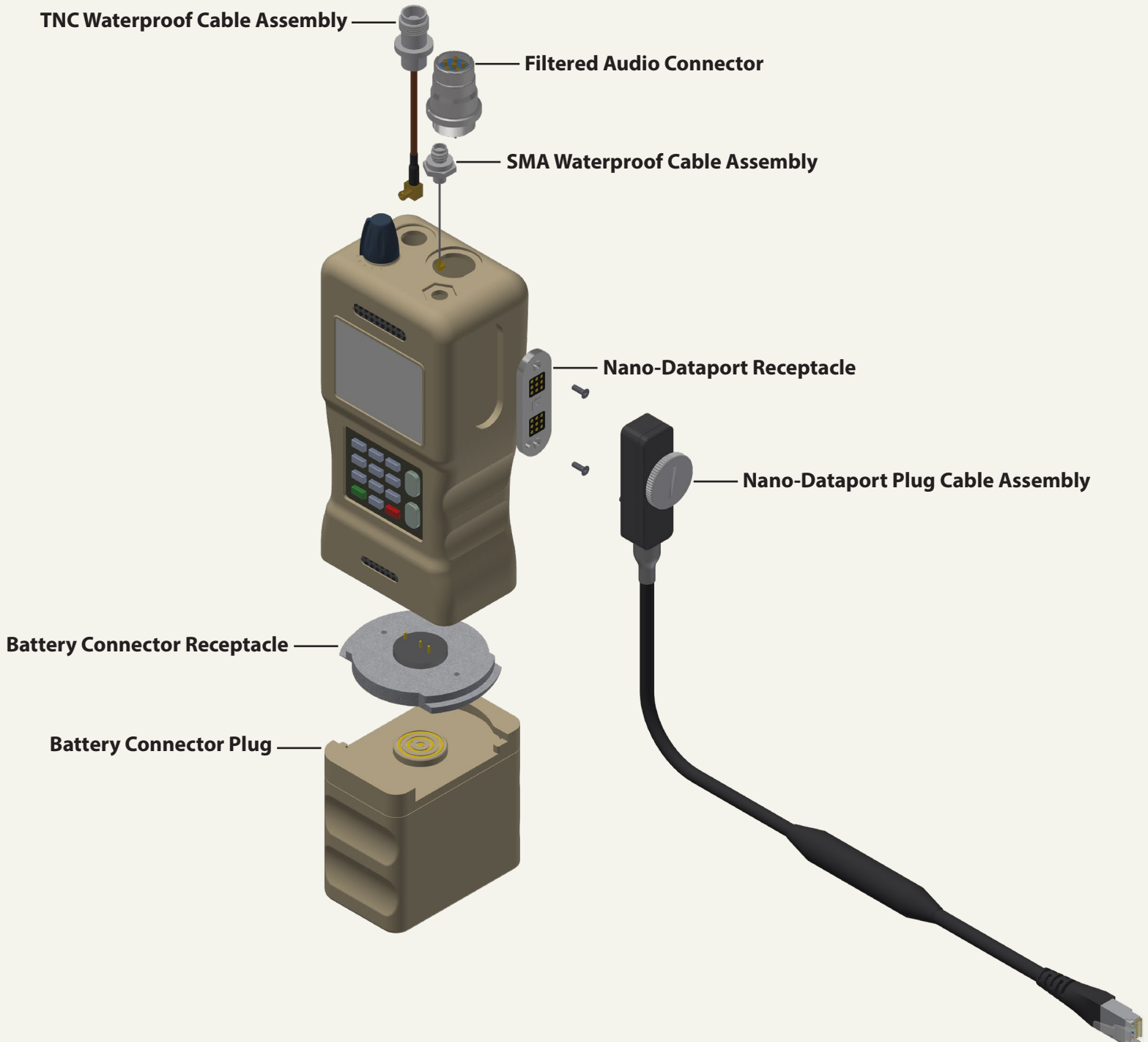
Military Connectors for Military Communications

Mil-Con: The Complete Solution for Military Radio

As the battlefield becomes more data-driven and dynamic, situational awareness and mission success are critically dependent on connecting ground and airborne data efficiently and securely across a soldier's network with handheld and wearable technologies.

For over 35 years, Mil-Con has supplied global military communications leaders with RF, Audio, Data, and Power connectors and cable assemblies to meet the needs of each technology generation.

This tradition continues with a full complement of radio connectors including our latest product line of Nano-Dataport products.

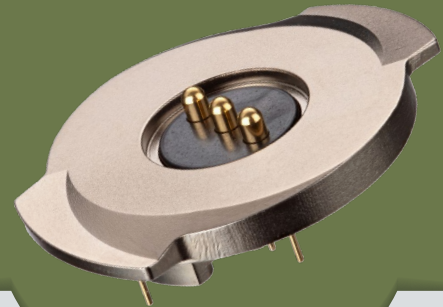


Military Dataport Connectors and Cable Assemblies



- Panel Mount Receptacles with Solder or PCB Terminals
- Cable Mount Plugs, Shielded, or Unshielded
- Contact Arrangements from 18-38 Positions
- 10,000 Mating Cycles
- Filtered and Non-Filtered Versions
- Polarized Simple Coupling (Spring-Loaded Contacts)
- Rated to Exceed IP67 (20 Meter Versions Available)
- Operating Temperature Range: -55°C to +85°C

Military Battery Connectors



- Flange Mount Receptacles with Solder or PCB Terminals
- Simple Twist-Lock Mating (Spring-Loaded Contacts)
- Contact Arrangements: 2, 3, 4, 6, and 18 Positions
- 3,000 Mating Cycles
- Stainless Steel and Nickel-Plated Aluminum Available
- Filtered and Non-Filtered Versions
- Rated to Exceed IP67, Sealed to 15 PSI
- Operating Temperature Range: -40°C to +85°C

Waterproof RF Connectors, Adapters, and Cable Assemblies



- SMA and TNC in Front and Rear-Mount Configurations
- RG-178, 1.13mm, 1.37mm Cable Types
- Adapters in SMA, TNC, and MMCX Interfaces
- Rated to exceed IP67 (Unmated/Mated Conditions)
- 500 Mating Cycles
- Frequency Range: DC to 18 GHz (Based on Series)
- Operating Temperature Range: -65°C to +165°C

Military Audio Connectors and Dust Caps



- Front, Rear, and Flange Mount Receptacles
- Contact Arrangements in 5, 6, 19, and 27 Positions
- Solder Cup, Barrel Cup, and PCB Terminals
- Filtered Options Include Pi and C-Type Filters
- Polarized Simple Coupling with Spring-Loaded Contacts
- 3,000 Mating Cycles
- Rated to Exceed IP67 (20 Meter Versions Available)
- Operating Temperature Range: -55°C to +85°C

Military Nano-Dataport Connectors and Cable Assemblies

Mil-Con offers 2 families of Dataport Connectors; our standard 32-position full size Dataport and a newer line of Nano-Dataport Connectors approximately 30% smaller for tomorrow's handheld communications. The Nano-Dataport Connectors offer a variety of high-density rectangular connector choices from standard selections to options tailored to your specific program. The options include:

- Contact Arrangements from 18 to 38 contacts per connector
- Standard or Filtered Signal Performance
- Printed Circuit or Solder Cup Terminations
- Environmental Protection Options to 20 Meters
- Standard Lightweight Molded Cable Assemblies for Data, Video, and Audio
- Shielded Cable Assemblies for Secure Data, Video, and Audio
- Cable Assemblies Easily Configured to Your Program Requirements

Through a strong commitment towards serving the military/defense markets, Mil-Con is a recognized leader in custom solutions for harsh environmental conditions with proven experience designing and manufacturing high density rectangular radio connectors.

[Choose from a Complete Kit of Dataport Solutions or Specify Your Connector and Cable Options.](#)



Part Number	Standard Dataport Connector Description	Mounting	Gender
MC3216P-1	Connector; 32-Position, Crimp Ferrule, Aluminum Housing	Cable Mount	Plug
MC3216R-1	Connector; 32-Position, Printed Circuit Tail, Unfiltered, Sealed	Panel Mount	Receptacle

Part Number	Nano-Dataport Connector Description	Mounting	Gender
MC2814P-1	Connector; 28-Position, Crimp Ferrule, Aluminum Housing	Cable Mount	Plug
MC2814R-1	Connector; 28-Position, Printed Circuit Tail, Unfiltered, Sealed	Panel Mount	Receptacle

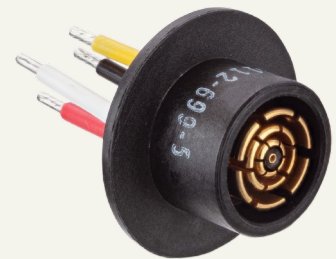
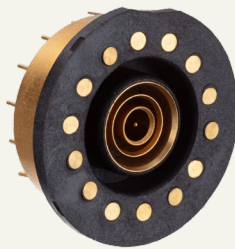
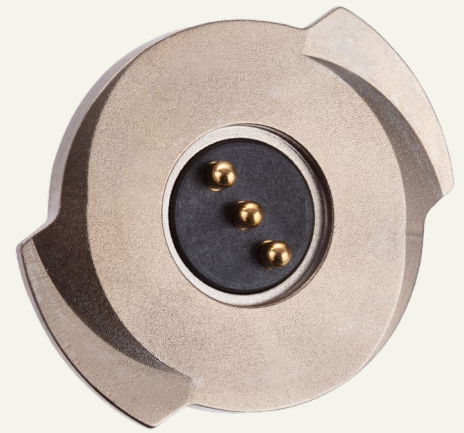
Part Number	Nano-Dataport Cable Assembly Description	Shielding	Termination Style
228FS99020	Cable Assembly; MC2814P-1, 28-Position, Overmolded, 10 inches	Unshielded	RJ45 Jack (Ethernet)
228FS99021	Cable Assembly; MC2814P-1, 28-Position, Overmolded, 10 inches	Unshielded	USB Type-A Receptacle
228FS99022	Cable Assembly; MC2814P-1, 28-Position, Overmolded, 10 inches	Unshielded	6-Position Audio Plug
228FS99023	Cable Assembly; MC2814P-1, 28-Position, Overmolded, 10 inches	Unshielded	BNC Jack (75 Ohm)
228FS99024	Cable Assembly; MC2814P-1, 28-Position, Overmolded, 10 inches	Unshielded	804 Mighty Mouse
228FS99027	Cable Assembly; MC2814P-1, 28-Position, Overmolded, 10 inches	Unshielded	USB Type-A Plug
228FS99040	Cable Assembly; MC2814P-1, 28-Position, 24 inches, For Testing	Unshielded	Flying Leads
228FS99032	Cable Assembly; MC2814P-1, 28-Position, 18 inches	Shielded	RJ45 Jack (Ethernet), TNR-E
228FS99037	Cable Assembly; MC2814P-1, 28-Position, 18 inches	Shielded	USB Type-A Receptacle, TNR-E
228FS99030	Cable Assembly; MC2814P-1, 28-Position, 10 inches	Shielded	6-Position Audio Connector Plug
228FS99035	Cable Assembly; MC2814P-1, 28-Position, 18 inches	Shielded	BNC Jack, Triax Cable, TNR-E
228FS99038	Cable Assembly; MC2814P-1, 28-Position, 18 inches	Shielded	USB Type-A Plug, TNR-E
228FS99025	Cable Assembly; MC2814P-1, 28-Position, 18 inches	Shielded	Lemo 10-Position Plug

Military Battery Connectors

Responding to critical demands for fail-safe rugged solutions, Mil-Con's family of Battery Connectors has expanded to include robust new designs. Secure, twist-locking connections prevent mis-mating of contacts from side-load damage, ensuring reliable field-use.

Serving true radio-side interface batteries with traditional plug/socket contact styles, as well as, circular contact designs, Mil-Con's Battery Connectors include filtered and unfiltered versions, in both solder cup and printed circuit board terminations. Standard and custom designs are also available, as are Cable Assemblies utilizing these connectors.

Mil-Con's Battery Connectors are compatible with a variety of MIL Batteries such as: BA5590, BB2590, BB3590, BB5590, BB590, BB390A/U, and AN/PRC-148 MBITR.



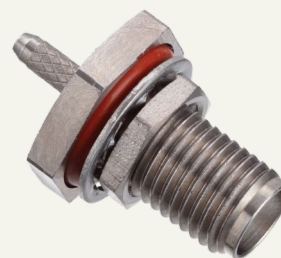
Part Number	Battery Connector Description	Mounting	Battery/Radio System
MC327	3-Position, Spring Loaded Contacts, Solder Cup	Radio	AN/PRC-148 MBITR or AN/PRC-152
MC327-1	3-Position Plus Ground, Spring Loaded Contacts, Solder Cup	Radio	
MC327-5	3-Position Plus Ground, Spring Loaded Contacts, Printed Circuit Tail	Radio	
MC427F-3-010-1	6-Position, Receptacle, Filtered Solid Contacts, Printed Circuit Tail	Radio	BA5590, BB2590, BB3590, BB5590, BB590, BB390A/U
MC427FB-3-010	6-Position, Receptacle, Filtered Solid Contacts, Solder Cup	Radio	
MC427SC	6-Position, Receptacle, Unfiltered Solid Contacts, Solder Cup	Radio	
MC4866112-434-1	18-Position, Receptacle, Solid Ring Contacts, Printed Circuit Tail	Radio	CSEL AN/PRQ-7 RADIO, BB-2001A/U, BT-70581, BT-70581A, BT-70581B, BT-70581Cx or BT-70676Bx
MC4866112-699-2	4-Position, Plug, Ring Contacts, 4 inch Flying Leads, Flangeless	Battery	
MC4866112-699-4	4-Position, Plug, Ring Contacts, 4 inch Flying Leads	Battery	
MC4866112-699-5	4-Position, Plug, Ring Contacts, .688 inch Flying Leads	Battery	
MC699-4	2-Position, Plug, Ring Contacts, 4 inch Flying Leads	Battery	

Waterproof RF Connectors, Adapters, and Cable Assemblies

Protecting against environmental contaminants is a critical requirement for trusted rugged connectors. Mil-Con's Waterproof RF Connector product line features high performance, consistent reliability, and is designed to withstand severe atmospheric conditions.

Offering a wide range of IP67 RF interconnect solutions, our family of Waterproof Connector products includes Connectors, Adapters, and Cable Assemblies.

Mil-Con's Waterproof SMA and TNC Connectors feature rear and front-mount designs, can be terminated to a wide variety of cables such as: RG-178 and 1.13mm, 1.32mm, and 1.37mm, and are resistant to corrosion, vibration, and shock. Securely connecting UHF and GPS antennas and ensuring a waterproof seal between the outer antenna and the radio, our weatherproof Adapters can accommodate SMA, TNC, and MMCX interface types.



Part Number	Waterproof Connector Description	Termination	Mounting	Cable Group
20-1917-0298P	SMA Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Front Mount	1.13 mm
20-1917-0398P	SMA Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Front Mount	1.32 mm
20-1917-0498P	SMA Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Front Mount	1.37 mm or RG-178
20-1965-0298P	SMA Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Rear Mount	1.13 mm
20-1965-0398P	SMA Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Rear Mount	1.32 mm
20-1965-0498P	SMA Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Rear Mount	1.37 mm or RG-178
42-1969-0290P	TNC Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Front Mount	1.13 mm
42-1969-0390P	TNC Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Front Mount	1.32 mm
42-1969-0490P	TNC Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Front Mount	1.37 mm or RG-178
42-1915-0290P	TNC Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Rear Mount	1.13 mm
42-1915-0390P	TNC Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Rear Mount	1.32 mm
42-1915-0490P	TNC Bulkhead, Stainless Steel Body/Passivated Finish	Solder/Crimp	Rear Mount	1.37 mm or RG-178

Part Number	Waterproof Adapter Description	Mounting	Outside Interface
2033-1165-00P	SMA Jack to MMCX Jack, Stainless Steel Body/Passivated Finish	Rear Mount	SMA Jack
2033-1180-00P	SMA Jack to MMCX Jack, Stainless Steel Body/Passivated Finish	Front Mount	SMA Jack
3342-1169-00P	TNC Jack to MMCX Jack, Stainless Steel Body/Passivated Finish	Front Mount	TNC Jack

Military Audio Connectors and Dust Caps

Mil-Con's MIL-DTL-55116 circular Audio Connectors have been utilized worldwide in communications equipment operating in harsh environments by the United States Armed Forces and Special Operations for over 35 years.

Available in standard 5 and 6-pin configurations, Mil-Con's Audio Connectors include both filtered and unfiltered versions in a variety of wire and printed circuit board terminations.

Mil-Con excels at custom designs to meet and exceed specific electrical, mechanical, and environmental requirements. Custom solutions include high density Audio Connectors, Cable Assemblies, and Harnesses, all incorporating 55116-style shells.

Dust caps are available for protection against EMI, dust, and water in a variety of plating and lanyard choices.



Part Number	Audio Connector Description	# of Terminals	Filter Type
MC183	Solder Cup Termination, 4-Slot Castle Nut Mounting Hardware	5	N/A
MC183-20	PCB Terminals .030" x .564", 4-Slot Castle Nut Mounting Hardware	5	N/A
MC183-9	PCB Terminals .040" x .437", 4-Slot Castle Nut Mounting Hardware	5	N/A
MC283	Solder Cup Termination, 4-Slot Castle Nut Mounting Hardware	6	N/A
MC283-20	PCB Terminals .030" x .564", 4-Slot Castle Nut Mounting Hardware	6	N/A
MC283-2	PCB Terminals .040" x .437", 4-Slot Castle Nut Mounting Hardware	6	N/A
MC183S	Solder Cup Termination, Hex Nut Mounting Hardware	5	N/A
MC529	Solder Cup Termination, Hex Nut Mounting Hardware	6	N/A
MC683S	Solder Cup Termination, Hex Nut Mounting Hardware	6	N/A
MC683G-21CN6	PCB Terminals .040" x .110", 6-Slot Castle Nut Mounting Hardware	6	N/A
MC683S-21CN4	PCB Terminals .040" x .110", 4-Slot Castle Nut Mounting Hardware	6	N/A

Part Number	Filtered Audio Connector Description	# of Terminals	Filter Type
MC283F-1-025	Solder Cup Termination, 4-Slot Castle Nut Mounting Hardware	6	Pi 3,000 pF (Pin A Grounded)
MC283F-1-025-5	PCB Terminal .040" x .185", 4-Slot Castle Nut Mounting Hardware	6	Pi 3,000 pF (Pin A Grounded)
MC183F-3-025	Solder Cup Termination, 4-Slot Castle Nut Mounting Hardware	5	Pi 3,000 pF - All Pins Filtered
MC183F-3-025-5	PCB Terminals .040" x .185", 4-Slot Castle Nut Mounting Hardware	5	Pi 3,000 pF - All Pins Filtered
MC283F-3-025	Solder Cup Termination, 4-Slot Castle Nut Mounting Hardware	6	Pi 3,000 pF - All Pins Filtered
MC283F-3-025-5	PCB Terminal .040" x .185", 4-Slot Castle Nut Mounting Hardware	6	Pi 3,000 pF - All Pins Filtered

Part Number	Dustcap Description	Mates With	Cord Material	End Cord Termination
MC810-5	Stainless Steel, Sand-Blasted, Passivated, Dust Protection	MC183, MC283	Stainless Steel	Stainless D-Flat Ring
MC811-2	Aluminum, Black Anodized, Dust/EMI Protection		Nylon/Olive Drab	Ø.766 inch ID Stainless Ring
MC810	Stainless Steel, Sand-Blasted, Passivated, Dust Protection	MC183, MC283, MC683S	Stainless Steel	Stainless Lug to Stainless Ring
MC811	Aluminum, Black Anodized, Dust/EMI Protection		Stainless Steel	Stainless Lug



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Contact **Mil-Con, Inc.**
with Technical Questions and New Design Inquiries
sales@mil-coninc.com • (800) 323-9562

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