

# PIC<sup>®</sup>

WIRE & CABLE

## HIGH PERFORMANCE INTERCONNECT PRODUCTS

PREMIUM CABLES, CONNECTORS & ASSEMBLIES DESIGNED  
FOR AEROSPACE & DEFENSE APPLICATIONS



# WHO WE ARE

## THE PREMIER INTERCONNECT SOLUTIONS EXPERTS

For more than 50 years, PIC Wire & Cable has been a leading provider of high-quality and reliable network cables, data transfer cables, and communication cables.

We are committed to providing high-quality, premium products and are always focused on providing superior solutions to the aerospace and defense industries.

Our technical sales experts have decades of combined experience in the industry, so they can guide engineers to a reliable interconnect solution. We understand applicable standards, certifications, and material selection so we can help you find cables and connectors that work for your project.

With decades of experience, our teams can solve tough challenges using innovative solutions and can deliver customized cables and connectors solutions. Our technical sales team and engineers are on your team: collaborating with you to ensure that your project is a success.

Make PIC your go-to for aerospace cabling solutions and you'll see why we've been trusted with some of the toughest jobs in the industry.

## MARKETS WE SERVE



### MILITARY & DEFENSE

PIC's rugged military cables and cable assemblies are built to last, even in extreme conditions--from temperature extremes, dry and dusty or wet and muddy conditions, to high shock and vibration environments. Our solutions are lightweight, solve routing issues, and deliver reliable performance. We make sure they're flexible enough for routing yet durable for the long haul.



### BUSINESS & CORPORATE

PIC has decades of experience partnering with leading aircraft OEMs to provide interconnect solutions for system critical applications. PIC offers a complete portfolio of cable, connector and assembly solutions for a wide range of applications. Our capabilities include aircraft antenna cables, TCAS cables, USB cables, premium Ethernet cables and data bus cable assemblies.



### COMMERCIAL

Technology is the backbone of the modern flight experience, and our products are quietly working behind the scenes to deliver a smooth, enjoyable flight experience. From in-flight entertainment and cabin management systems to avionics, PIC cables transmit at high speeds and support high-resolution displays in the cockpit and cabin, providing constant connectivity throughout the entire length of the aircraft.

*This is what we do*—we're here to make our customer's jobs easier.

# PRODUCT PORTFOLIO

## PICMATES CABLES

PICMates cables are engineered for dependable, long-term performance in even the most challenging aerospace conditions and are designed to maintain electrical and mechanical integrity during a flight or mission, so your data will always be where you need it.

With PICMates cables, you'll find:



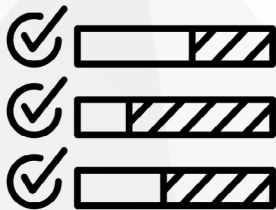
Robust and durable design to provide high performing, reliable signal transmissions with outstanding electrical & mechanical integrity



Significant weight savings for enhanced fuel efficiency and increased payload



Greater cable flexibility and smaller diameters for easier routing and installation in tight, crowded areas



Performance under pressure - Resistant to shock, vibration, abrasion, contaminants, temperature fluctuations and more.

# PICMATES® 50 OHM RF CABLE SOLUTIONS

Our 50 Ohm RF Cables provide low attenuation, a lightweight design and easy installation. PICMates RF cables will allow you to save on a variety of things- from fuel consumption to making your equipment easier to install, without sacrificing performance.

We design them to have optimal characteristics like small size, low weight and outstanding strength and offer two types of construction to ensure you get the right coaxial cable for your application.

**UltraLite RF Cables (50 Ohm)** – Premium coaxial cables built with low loss and ultra-lightweight materials.

**S Line of RF Cables (50 Ohm)** – The workhorse of the industry with decades of proven performance in the aerospace and defense markets.

## APPLICATIONS:

- TCAS and Navigation
- Collision Avoidance
- Communications & SATCOM
- Marker Beacon
- GPS Connectivity
- Cockpit Displays
- Surveillance Cameras
- ADS-B
- Mode S

## 50 OHM ULTRALITE COAX CABLE SOLUTIONS

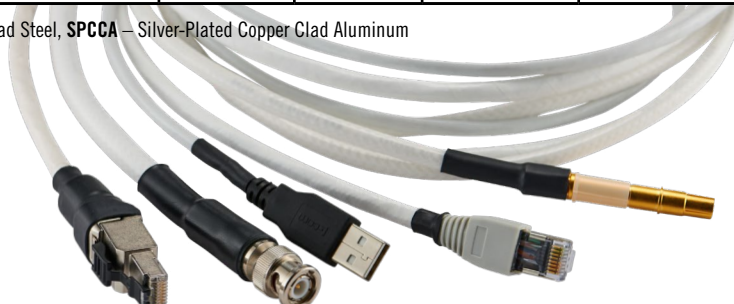
ULTRALITE coaxial cables from PIC are the next step in cutting-edge technology. Our latest innovation is designed to be light as a feather and built with low loss materials so that you never sacrifice quality again. ULTRALITE cables are an expansion of our already successful 50-ohm RF coaxial cable line to provide extra weight savings for those who with weight critical applications.

- UH44193 offers **30% weight savings** compared to cables of a similar size and **56% lighter** and has significantly lower loss than RG400/142 coax cable.
- UH67163 is **more than 30% lighter** than cables of a similar size and **80% lighter** than traditional RG393 coax cable.
- UH22089 can **save 60% or more in cable weight** compared to cables of a similar size and has a lower loss.
- UH25107 is **up to 80% lighter** than RG211

## ULTRALITE 50 OHM COAX CABLES

PART #	DATA CONDUCTOR	LOSS @ 1.0 GHz NOM/MAX dB/100 FT. (100 M)	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	BEND RADIUS IN (MM)	SHIELDING EFFECTIVENESS (dB min)	JACKET
UH25107	8 AWG Solid SPCCA	2.8/3.1 (9.2/10.2)	12.0 (17.9)	0.445 (11.3)	2.5 (63.5)	-110	Extruded ETFE , White (Laser Markable)
UH22089	10 AWG Solid SPCCA	3.5/3.9 (11.5/12.8)	7.2 (10.7)	0.345 (8.76)	1.7 (43.18)	-110	Extruded ETFE , White (Laser Markable)
UH67163	14 AWG Solid SPCCA	6.2/6.8 (20.3/22.3)	3.4 (5.1)	0.227 (5.77)	1.2 (30.48)	-110	Extruded ETFE , White (Laser Markable)
UH44193	19 AWG Solid SPCCS	10.4/11.6 (34.1/38.1)	1.9 (2.8)	0.155 (3.94)	0.8 (20.32)	-110	Extruded ETFE , White (Laser Markable)

Materials Key: SPCCS – Silver Plated Copper Clad Steel, SPCCA – Silver-Plated Copper Clad Aluminum



## 50 OHM RF CABLE SOLUTIONS

PART #	DATA CONDUCTOR	LOSS @ 1.0 GHz NOM/MAX dB/100 FT. (100 M)	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	BEND RADIUS IN (MM)	SHIELDING EFFECTIVENESS (dB min)	JACKET
S22089	10 AWG Stranded SPC	3.5/3.9 (11.5/12.8)	18 (26.8)	0.435 (11.05)	2.5 (63.5)	-90	Extruded Clear, FEP
S55122	12 AWG Stranded SPC	5.1/5.6 (16.7/18.4)	8.3 (12.4)	0.31 (7.87)	1.55 (39.37)	-90	Extruded FEP, Clear
S33141	14 AWG Stranded SPC	6.7/7.4 (22.0/24.3)	6.5 (9.7)	0.27 (6.86)	1.4 (35.56)	-90	Extruded FEP, Clear
S67163	15 AWG Solid SPC	7.0/7.7 (23.0/25.3)	5.4 (8.0)	0.225 (5.72)	1.2 (30.48)	-90	Extruded FEP, Clear
S65161-A	16 AWG Stranded SPC	8.2/9.1 (26.9/29.9)	3.5 (5.2)	0.195 (4.95)	1 (25.4)	-110	Extruded ETFE, White (Laser Markable)
S44193	19 AWG Solid SPCCS	11.1/12.2 (36.4/40.0)	4.3 (6.4)	0.195 (4.95)	1 (25.4)	-90	Extruded FEP, Clear
S44191	20 AWG Stranded SPC	11.8/13.0 (38.7/42.7)	4.3 (6.4)	0.195 (4.95)	1 (25.4)	-90	Extruded FEP, Clear
S88207	20 AWG Solid SPC	12.8/4.1 (42.0/46.3)	1.9 (2.8)	0.13 (3.3)	0.65 (16.51)	-80	Extruded FEP, Clear
S86208	21 AWG Stranded SPC	14.1/15.5 (46.3/50.9)	1.95 (2.9)	0.13 (3.3)	0.65 (16.51)	-80	Extruded FEP, Clear
S40501	24 AWG Solid SPCCS	19.4/21.4 (63.6/70.2)	1.4 (2.1)	0.104 (2.64)	0.625 (16)	-110	Extruded FEP, Solid Blue
S46191	20 AWG Stranded TPC	22.3/24.6 (73.2/80.7)	2.68 (4.0)	0.195 (4.95)	1 (25.4)	-75	Extruded FEP, Brown Tint, Translucent
S31601	26 AWG Stranded SPCCS	26.3/31.2 (86.3/102.4)	1.0 (1.5)	0.102 (2.59)	0.5 (12.7)	-90	Extruded ETFE, White (Laser Markable)
<b>TRIAx CABLES</b>							
L8620TX	21 AWG Stranded SPC	15.1/16.6 (49.5/54.5)	2.9 (4.3)	0.173 (4.39)	0.9 (21.59)	-90	Extruded ETFE, White (Laser Markable)
L2201TX	20 AWG Stranded TPC	20.4/22.4 (66.9/73.5)	6.0 (8.9)	0.245 (6.22)	1.3 (31.75)	-75	Extruded, FEP, Clear

Materials Key: TPC – Tin-Plated Copper, SPC – Silver-Plated Copper, SPCCS – Silver-Plated Copper

## 50 OHM HIGH FREQUENCY CABLE SOLUTIONS

High-frequency applications on the Ku and X bands need cables with outstanding signal integrity and low insertion loss. Our 50 Ohm microwave cable assemblies are designed specifically for this purpose. These cables are designed to optimize performance and give system designers flexibility. Our products give you superior signal integrity, low insertion loss, less RF interference, and a robust yet easy-to-install design.

### APPLICATIONS:

- Navigation/Communication Systems
- Electronic warfare (EW) Systems
- Electronic Surveillance
- Countermeasures/Jamming
- Radar warning receiver (RWR) Systems
- Electronic/Signal Intelligence
- C5ISR (Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance, and Reconnaissance)

## HIGH FREQUENCY COAX CABLES

PART #	DATA CONDUCTOR	MAX FREQUENCY	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	BEND RADIUS IN (MM)	V.O.P. %	SHIELDING EFFECTIVENESS (dB min)	JACKET
HH85295F	11 AWG Solid SPC	18 GHz	7.9 (11.8)	0.291 (7.39)	1.5 (38.1)	83	-110	Extruded FEP, Olive Drab
HT77300F	12 AWG Solid SPC	18 GHz	8.8 (13.1)	0.300 (7.62)	1.5 (38.1)	77	-90	Extruded FEP, Olive Drab
HT77210F	16 AWG Solid SPC	26 GHz	4.5 (6.7)	0.208 (5.28)	1 (25.4)	76.5	-90	Extruded FEP, Olive Drab

Materials Key: SPC – Silver-Plated Copper

All values nominal, unless otherwise noted

# PIC MATES® 75 OHM RF CABLE SOLUTIONS

Our 75 ohm coaxial and triaxial video cables are lightweight, low loss, flexible, easy to terminate for reliable performance in aircraft systems. They're specifically designed and manufactured for reliable performance in aircraft systems and other harsh environments involving high temperature, strong EMI, corrosive materials and more. Our cables exceed stringent standards, save valuable weight on your next mission, simplify routing and reduce your operating costs.

## APPLICATIONS:

- Cockpit Displays
- Surveillance Cameras
- Cabin Entertainment
- ADS-B
- Mode S
- Blu-Ray & High Definition Video
- TCAS and Navigation
- Collision Avoidance
- Communications & SATCOM

## 75 OHM RF CABLES

PART #	DATA CONDUCTOR	WEIGHT LBS/100 FT (KG/100 M)	O. D. IN (MM)	TEMP. RANGE (°C)	BEND RADIUS IN (MM)	SHIELDING EFFECTIVENESS (dB min)	JACKET
<b>COAX CABLES</b>							
V78209	20 AWG Stranded SPC	3.15 (4.7)	0.211 (5.36)	-55/+150 °C	1.1 (27.9)	-90	Extruded ETFE, White (Laser Markable)
V73263	26 AWG Stranded SPC	1.5 (2.2)	0.125 (3.18)	-55/+150 °C	0.65 (16.51)	-110	Extruded ETFE, White (Laser Markable)
V76261	26 AWG Stranded SPC	1.1 (1.6)	0.122 (3.1)	-55/+150 °C	0.6 (15.24)	-90	Extruded ETFE, White (Laser Markable)
V75268	26 AWG Stranded SPC	1.3 (1.9)	0.122 (3.1)	-55/+150 °C	0.6 (15.24)	-50	Extruded FEP, Red
<b>TRIAx CABLES</b>							
L7626TX	26 AWG Stranded SPC	2.2 (3.3)	0.157 (3.99)	-55/+150 °C	0.8 (3.3)	-90	Extruded ETFE, White (Laser Markable)

Materials Key: SPC – Silver-Plated Copper

*All values nominal, unless otherwise noted*



## PROPER CABLE ASSEMBLY IS KEY TO MAXIMIZING THE BENEFITS OF CABLE AND CONNECTOR TECHNOLOGY

With PIC Assemblies, we take care of assembling cables and connectors to maximize their performance. PIC assemblies deliver outstanding mechanical and electrical performance while preserving signal integrity.

PIC Assemblies Offer:

- Full range of cables and connectors, even custom solutions, from design to delivery
- Manufactured and precision-assembled in house by highly skilled technicians
- Specialty tooling ensures your assembly is done with precision to optimize performance and durability
- Ready-to-install assemblies for plug-and-play use, minimizing installation labor
- Assemblies are tested to meet system specifications, maintain quality and ensure reliability
- Test data is sent with every assembly and retained for future reference

## CAPABILITIES & TESTING

PIC offers a wide variety of engineering experience and capabilities throughout our manufacturing facility. These skills are used to design, manufacture, test and assemble harnesses and assemblies.

Capabilities Include:

- Overmolding capability
- Termination by skilled technicians
- Laser Marking for custom labeling
- Mechanical testing for shock and vibration
- Phase matching
- VSWR testing and reporting
- Complete lot traceability with serialization



As aircraft avionics become more complex, the need for increased bandwidth and reliability becomes increasingly important. With Ethernet replacing ARINC 429 point-to-point connections, the industry needs scalable networks that provide the best quality of service without fail.

PICMates Ethernet Cables include 1 pair, 2 pair, 4 pair and Quadrx 100 ohm shielded ethernet cables carrying high-speed data up to 10G. Our specially engineered Cat5e/6/6a cables perform high-speed transmission needs in aircraft cabins or flight decks.

Our rugged and fast USB cables allow you to upload/download data at speeds up to 10 Gb when it matters most. Whatever the environment - in a cockpit or cabin - we make sure you stay connected without interruption. Our cables are durable enough to endure extreme aerospace conditions and still provide high-speed data transmission, from takeoff to landing.

## APPLICATIONS:

- Avionics Network
- Cabin/Flight Management Systems
- Digital Video Systems
- Ethernet Backbone
- Content Loading
- Data Transfer
- Electronic Flight Bag (EFB)
- Portable Electronic Devices
- Power Remote Devices
- Program Upgrades (commercial/business)

## 1 PAIR ETHERNET CABLES

PART #	SPEED RATING	DATA CONDUCTOR	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)	JACKET
E10222	CAT5E 10/100 BASE-T	22 AWG TPC	2.3 (3.4)	0.19 (4.8)	-55/+150°C	328 (100)	ETFE, White (Laser Markable)
E5E2222-D	CAT5E 10/100 BASE-T	22 AWG SPC	2.38 (3.51)	0.183 (4.64)	-55/+200°C	328 (100)	ETFE, White (Laser Markable)
E13224	CAT5E 10/100 BASE-T	24 AWG SPHSCA	2.2 (3.3)	0.168 (4.27)	-55/+200°C	328 (100)	PTFE, White (Laser Markable)
E60224	CAT5E 10/100 BASE-T	24 AWG SPC	0.9 (1.3)	0.102 (2.59)	-55/+200°C	*	ETFE, White (Laser Markable)
E20224	CAT5E 10/100 BASE-T	24 AWG SPHSCA	1.07 (1.6)	0.141 (3.58)	-55/+200°C	273 (83)	ETFE, White (Laser Markable)
E12224	CAT5E 10/100 BASE-T	24 AWG TPC	1.58 (2.4)	0.146 (3.71)	-55/+150°C	255 (78)	ETFE, White (Laser Markable)
E61224	CAT5E 10/100 BASE-T	24 AWG SPHSCA	1.98 (3.0)	0.159 (4.04)	-55/+200°C	328 (100)	ETFE, White (Laser Markable)
E10224	CAT5E 10/100 BASE-T	24 AWG SPC	2.18 (3.2)	0.163 (4.06)	-55/+200°C	328 (100)	FEP, Translucent Blue
E13226	CAT5E 10/100 BASE-T	26 AWG SPHSCA	1.7 (2.5)	0.134 (3.4)	-55/+200°C	224 (68)	PTFE, White (Laser Markable)

## 2 PAIR ETHERNET CABLES

PART #	SPEED RATING	DATA CONDUCTOR	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)	JACKET
E10422	CAT5E 10/100 BASE-T	22 AWG SPC	3.7 (5.5)	0.295 (7.49)	-55/+200°C	328 (100)	ETFE, White (Laser Markable)
E13424	CAT5E 10/100 BASE-T	24 AWG SPHSCA	2.9 (4.3)	0.224 (5.69)	-55/+200°C	268 (82)	PTFE, White (Laser Markable)
E12424	CAT5E 10/100 BASE-T	24 AWG TPC	2.3 (3.4)	0.208 (5.28)	-55/+150°C	257 (78)	ETFE, White (Laser Markable)
E61424	CAT5E 10/100 BASE-T	24 AWG SPHSCA	2.98 (4.4)	0.223 (5.66)	-55/+200°C	269 (82)	ETFE, White (Laser Markable)
E10424	CAT5E 10/100 BASE-T	24 AWG SPC	3.3 (4.9)	0.21 (5.28)	-55/+200°C	268 (82)	FEP, Translucent Blue
E20424	CAT5E 10/100 BASE-T	24 AWG SPC	4.18 (6.2)	0.265 (6.73)	-55/+200°C	296 (90)	FEP, Translucent Blue
E13426	CAT5E 10/100 BASE-T	26 AWG SPHSCA	2.0 (2.9)	0.16 (3.99)	-55/+200°C	224 (68)	PTFE, White (Laser Markable)

Materials Key: TPC – Tin-Plated Copper, SPC – Silver-Plated Copper, SPHSCA – Silver-Plated High Strength Copper Alloy, \*no maximum distance

All values nominal, unless otherwise noted



## 4 PAIR ETHERNET CABLES

PART #	SPEED RATING	DATA CONDUCTOR	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)	JACKET
E84824	CAT8 40G BASE-T	24 AWG SPCA	4.6 (2.08)	0.28 (7.1)	-55/+200°C	90 (27)	ETFE, White (Laser Markable)
E74824	CAT7 10G BASE-T	24 AWG SPCA	4.7 (7.0)	0.28 (7.11)	-55/+200°C	296 (90)	ETFE, White (Laser Markable)
E74826	CAT7 10G BASE-T	26 AWG SPCA	3.3 (4.9)	0.23 (5.84)	-55/+200°C	230 (70)	ETFE, White (Laser Markable)
E6A5824	CAT6A 10G BASE-T	24 AWG SPHSCA	4.2 (6.3)	0.255 (6.6)	-55/+200°C	296 (90)	PTFE, White (Laser Markable)
E6A6824	CAT6A 10G BASE-T	24 AWG SPHSCA	4.4 (6.5)	0.26 (6.6)	-55/+200°C	246 (75)	PTFE, White (Laser Markable)
E6A0824	CAT6A 10G BASE-T	24 AWG SPC	5.28 (7.9)	0.275 (6.99)	-55/+200°C	246 (75)	FEP, Translucent Blue
E6A5826	CAT6A 10G BASE-T	26 AWG SPHSCA	3.0 (4.5)	0.215 (5.46)	-55/+200°C	230 (70)	PTFE, White (Laser Markable)
E6A6826	CAT6A 10G BASE-T	26 AWG SPHSCA	3.2 (4.8)	0.22 (5.59)	-55/+200°C	214 (65)	PTFE, White (Laser Markable)
DV0824	CAT5E 1000 BASE-T	24 AWG SPHSCA	7.7 (11.5)	0.35 (8.89)	-55/+200°C	*	ETFE, White (Laser Markable)
E50824	CAT5E 1000 BASE-T	24 AWG SPC	5.0 (7.4)	0.265 (6.73)	-55/+200°C	268 (82)	FEP, Translucent Blue

## QUADRIXIAL CABLES

PART #	SPEED RATING	DATA CONDUCTOR	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)	JACKET
E51424	10/100 BASE-T	24 AWG SPHSCA	2.2 (3.3)	0.161 (4.09)	-55/+150°C	255 (78)	ETFE, White (Laser Markable)
E50424	10/100 BASE-T	24 AWG SPC	2.7 (4.0)	0.17 (4.32)	-55/+200°C	236 (72)	FEP, Translucent Blue
E51426	10/100 BASE-T	26 AWG SPHSCA	1.8 (2.7)	0.137 (3.48)	-55/+150°C	214 (65)	ETFE, White (Laser Markable)
E51428	10/100 BASE-T	28 AWG SPHSCA	1.0 (1.5)	0.115 (2.92)	-55/+200°C	170 (52)	PTFE, White (Laser Markable)

## POWER OVER ETHERNET (PoE) CABLES

PART #	SPEED RATING	DATA CONDUCTOR	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	MAX. DISTANCE FT (M)	JACKET
E5E3624	CAT5E	24 AWG SPCA	4.5 (6.7)	0.25 (6.35)	-55/+200°C	268 (82)	PTFE, White (Laser Markable)
E5E1724	CAT5E	24 AWG TPC	3.56 (5.3)	0.208 (5.28)	-55/+150°C	257 (78)	ETFE, White (Laser Markable)

## USB CABLES

PART #	SPEED RATING	DATA/POWER CONDUCTOR	WEIGHT LBS/100 FT (KG/100 M)	O.D. IN (MM)	TEMP. RANGE	TIME DELAY (NS/FT)	JACKET
USB2422	USB 2.0	24/22 AWG SPC	2.36 (3.51)	0.18 (4.57)	-55/+150°C	1.39 (4.56)	ETFE, White (Laser Markable)
USB2624	USB 2.0	26 AWG SPHSCA/ 24 AWG SPC	2.2 (3.27)	0.164 (4.17)	-55/+200°C	1.48 (4.86)	PTFE, White (Laser Markable)
USB3-2624	USB 3.1	26/24 AWG SPHSCA	3.4 (5.06)	0.209 (5.31)	-55/+200°C	1.46 (4.79)	PTFE, White (Laser Markable)

Materials Key: TPC – Tin-Plated Copper, SPC – Silver-Plated Copper, SPCA – Silver-Plated Copper Alloy, SPHSCA – Silver-Plated High Strength Copper Alloy, \*no maximum distance  
All values nominal, unless otherwise noted



## RUGGED INTERCONNECT SOLUTIONS

MACHFORCE is an innovative and rugged D38999 style 10G Ethernet connector engineered for sophisticated, high-speed electronics in the aerospace and defense market. Your time is valuable, so the MACHFORCE connectors were designed to save time during installation and greatly reduce downtime during future aircraft/vehicle maintenance.

### APPLICATIONS:

- C5ISR
- Cyber Security
- Autonomous Weapons
- Artificial Intelligence



### OUTSTANDING HIGH-SPEED PERFORMANCE

Our patented High Speed Module (HSM) makes the density possible.

- HSMs are configured in a linear pattern
  - More modules in a single row
  - Provides better electrical performance due to reduced crosstalk
- Allows every twisted pair to maintain its twist right up to the pin or socket providing a 360° grounding contact to the high-speed module

### TRANSMITS MORE DATA IN LESS SPACE

- Add more functionality without increasing your box size
- MACHFORCE's proprietary design maximizes port density and allows for
  - 10 Ethernet cables in a size 25 housing
  - 4 Ethernet cables in a size 17 housing
- Reduced number of connectors results in smaller, lighter and more compact final product

### BETTER & EASIER TERMINATION

- Utilizing the high-speed module, termination time is reduced
  - Simpler for inexperienced technicians
  - Great choice for streamlining termination processes
- No special tooling required
  - Industry-standard tools
  - 22D pins & sockets
- Field repairability
  - The connector body and HSM provides direct access to terminated wires
  - PCB accessibility allows for pin changes without disturbing contacts or board components

### RUGGEDIZED TECHNOLOGY

- Robustness and excellent electrical performance have not been sacrificed despite its compact design
- Temperature extremes of -60 to 200°C
- Pair with PIC E6A6824 or E6A6826 Ethernet cables for an extremely robust, high-speed data solution
- Backshells provide strain relief and ingress protection (IP67) against sand, dust, and fluids
- Anti-decoupling ring allows for secure connection in high shock and vibration environments

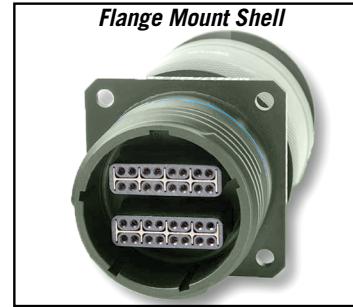


## CONNECTOR

SAMPLE PART NUMBER: MF 3825 F S W N - EC

PRODUCT	MF	Family: MACHFORCE								
SHELL TYPE	3825	D38999 – Size 25	3817	D38999 – Size 17						
SHELL STYLE	F	Flange Mount Receptacle*	P	Straight Plug	J	Jam Nut Receptacle				
CONTACT	S	Sockets (F or J Shell Style)	P	Pin (Plug Only)						
PLATING	W	Olive Drab Cadmium								
KEY POSITION DETAIL	N	80	142	196	293	C	66	140	200	257
	A	135	170	200	310	D	62	145	180	280
	B	49	169	200	244					
CABLE TYPE	EC	24 AWG Ethernet (E6A6824)	PC1	PCB Mount (F or J Style)						
	ED	26 AWG Ethernet (E6A6826)								

\*¼" Mounting Nut Plates Available ‡Contact PIC Wire & Cable for availability



## BACKSHELL

SAMPLE PART NUMBER: MF 3825 SP W S BC

PRODUCT	MF	Family: MACHFORCE		
SHELL TYPE	3825	D38999 – Size 25	3817	D38999 – Size 17
STYLE	SP	Standard Profile Sealed	LP	Low Profile Unsealed
PLATING	W	Olive Drab Cadmium		
ANGLE	S	Straight	R	Right Angle (SP Style, 3817 Shell Type Only)
CABLE TYPE	BC	24 AWG Ethernet (E6A6824)	BD	26 AWG Ethernet (E6A6826)

‡Contact PIC Wire & Cable for availability



For those with specific or unique applications, MACHFORCE is offered as a complete assembly for your customization needs. For customized configurations, contact PIC Wire & Cable.

# LET PIC WIRE & CABLE FIND SOLUTIONS FOR YOUR TOUGHEST CONNECTIVITY CHALLENGES

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For more than 50 years, PIC Wire & Cable has been a leading provider of high-quality and reliable network cables, data transfer cables, and communication cables. With deep aerospace and defense application knowledge, our technical specialists provide support throughout the entire system design and can assist with customization and rapid prototyping services. Make PIC your go-to for aerospace cabling solutions and you'll see why we've been trusted with some of the toughest jobs in the industry.

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