## cannøn

## Aerospace Product Selection Guide

# We Connect When it Matters Most

ITT Cannon's family of interconnect solutions for commercial, space, and military aerospace applications are designed to deliver the ultimate in quality, reliability and performance. From in-flight entertainment, to avionic and end-to-end pylon solutions, we connect the next generation of flight with secure connectivity.





## **Cannon's History of Innovation**

From Cannon's 1930 invention of AF plugs for Douglas' DC planes to our 1950's launch of the first multi-purpose D-Subminiature connector, our brand has been synonymous with innovation, reliability and quality for over 100 years.

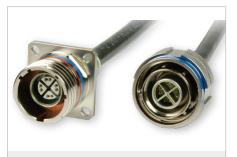
Today, we continue to innovate on behalf of thousands of customers worldwide with the latest fiber-optic, environmental resistant and miniaturized connectors.

## High-Speed Data Contact Systems





Quadrax Multi-Signal Contact Systems



OctoGig™ 10 Gigabit Ethernet

## Modern Connectivity Demands Shaping Your Design

Whether it's an end-to-end fiber optic solution providing data transmission speeds of +10 Gbps or interconnects ensuring secure data protocols, and weapon systems readiness, ITT Cannon understands the innovative requirements pushing today's aircraft networks to perform no matter the situation.

ITT Cannon offers a unique portfolio of off-the-shelf and custom solutions including termini, mounting, plating and coupling options.



MKJ Miniaturized Circular Series Versatile, high performance small form factor series offered in a variety of coupling methods including - UNC thread, double start, triple start, bayonet and breakaway.



#### **MKJ Clip Lock**

Low cost, miniature connector with up to 19 high density size 23 machine contacts and clip latching system providing ease of use during installation and maintenance.



**RPR Series with PCB Contacts** Lightweight, EN4165-Style modular interconnect features precision PCB tail alignment and is front-release, rear removable with Cannon designed latching mechanism.



**D-Subminiature Series** From MIL-DTL-24308 configurations to hermetically sealed and our Combo-D with High Power (HEP) Contacts, Cannon offers a wide array of highly engineered D-Sub's.



#### **KJ Series**

38999-Style Series I, II, III Connectors designed to withstand extreme shock, exposure, and vibration. Customizable with high-speed or fiber termini, hermetics, filters & custom mounting.



WEIGHT REDUCTION HIGH DENSITY / SIZE REDUCTION INCREASED EASE OF ASSEMBLY & MAINTENANCE HIGH-SPEED DATA TRANSMISSION



#### ARINC 600 / BKA Rack & Panel Series

Highly engineered, blind mate interconnects available in 3 & 6 gang configurations. Accommodate crimp, Quadrax, OctoGig, power, and PCB contacts.



#### ARINC 404 / DPX Rack & Panel Series

Single, dual, three and four gang versions and can accommodate up to 424 contacts. Easy of assembly with rear insertion and release crimp contacts.



#### **Fiber Optic**

Complete end-to-end solutions includes connectors, termini & cable harnesses capable of operating at transmission speeds of 10 gigabits/sec (Gb/s) or more.



#### Microminiature

M83513, MDM, Low Profile, High Temp, and circular microminiature connectors with 9-100 contacts including filter, hermetic, mixed signal & high voltage options.

Modern aircraft are technology rich environments, packed with electrical wiring and integrated systems for avionics, sensors, communication systems, weapons and entertainment systems. All of which rely on secure power and on-board networks to ensure a safe and connected flight.



## **AVIONICS**

Our avionics solutions range from simple flight system control interconnects to critical connectors used in navigation, imaging and automated flight tracking systems.

## Solutions:

BKA ARINC 600, DPX ARINC 404, DPK 83733-Style, PHD Fiber Optics, ARINC 600 Filter, NGCON, KJAF Fiber, Micro-D

## **CABIN SYSTEMS**

Integrated solutions that distribute critical power and signal throughout the aircraft, as well as lightweight and space-saving connectors to help customers optimize load and reduce installation time.

## Solutions:

BKA ARINC 600, DPX ARINC 404, DPK 83733-Style, PHD Fiber Optics, ARINC 600 Filter, RPR, D-Sub, MKJ ClipLock

## IFE

3

We support the ever increasing demand for In-Flight Entertainment through a wide range of high bandwidth copper and fiber products that deliver multi-gigabit data in small lightweight packages.

## Solutions:

BKA ARINC 600, DPX ARINC 404, RPR, KPSE, KJB, KJAQ Quadrax, Fiber Optics

CONTROL SYSTEMS

These highly engineered control systems interconnects minimize cost and weight while maximizing reliability, and are highly engineered to perform in severe service environments.

#### Solutions:

KJA Series III, KJAY Hermetic, KJAYA Aluminum Hermetic PV 26482-Style Series II, ARINC 600 Filter

## **DEFENSE SYSTEMS**

From munition systems to head-up displays, and critical pylons we specialize in reliable, harsh environment interconnect solutions and cable assemblies for mission critical applications.

#### Solutions:

Micro-D, D-Sub, MKJ, Nano, Nemesis, HDx, KJA/B, Fiber Optics

## **APU & POWER**

6

Designed to withstand severe vibration and extreme temperatures from high-altitudes to engine systems, Cannon offers a full range of high temperature, power, and voltage solutions.

## Solutions:

KJA/B, FRF 5015 Firewall, Combo-D with HEP

					1			
			MKJ ClipLock	МКЈЗ	MKJ4	МКЈ5	Nemesis	HDx
			<b>E</b>					
	S	tandards/Associated Specifications			GOSSRA, Nett Warrior	MIL-DTL-32689 (in development)		
	M	ax Operating Voltage	200-600 V AC	200-600 V AC	200-600 V AC	200-600 V AC	165 V AC	250VDC
Electrical	Dielectric Voltage (sea level)		750-1800 V AC	750-1800 V AC	750-1800 V AC	750-1800 V AC	500 VDC	2mA @ 1000 VAC RMS
Elec	Current Rating @40C (MAX)		5A-23A	5A-46A	5A-46A	5A-46A	2A, 3A Peak	Ø0.3mm Contact: 1A Ø0.7mm Contact: 5A
		EMI / RFI Shielding	No	Yes	Yes	Yes	Yes	Yes
	Wi	re Gauge Range AWG	28 to 12	28 to 8	28 to 8	28 to 12	30 to 22	28 to 22
	Pov	ver and Signal layouts	No	Yes	Yes	Yes	Yes	Yes
Mechanical	1	Vlating cycles (max)	500	250 Aluminium 2000 Stainless Steel	2000	500	10K Std Plug; 5K Dual Coupling Plug	5,000
1ech		Type of Coupling	Push Pull / Clip	Bayonet	Breakaway	Triple Start, Threaded	Breakaway / Pogo	Breakaway or Locking
2		Styles	In-Line, Box Mount, Straight Plug, PCB	In-Line, Box Mount, Straight Plug, Jam Nut (rear), PCB	In-Line, Box Mount, Straight Plug, Jam Nut (rear & front) PCB	In-Line, Box Mount, Straight Plug, Jam Nut (rear & front) PCB	In-Line, Straight, Jam Nut, PCB	In-Line, Straight, Jam Nut, PCB
	Environ. Sealing (mating)		IP67 per IEC60529 / 1 Meter for 1 Hour	Splash Proof	1 Meter for 1 Hour	1 Meter for 1 Hour	IP67 STD, IP68 20M	IPX8 20M
	Operating Temp		-65°C to 175°C	-65°C to 175°C	-65°C to 175°C	-65°C to 175°C	-55°C to 125°C	-51°C to +125°C
(br	Shock Test (g's)		300	300	300	300	50	50
natir	Max Vibration Resistance		30 g's, 3 axes	30 gʻs, 3 axes	30 g's, 3 axes	30 g's, 3 axes	20 g's, 3 axes	10-2,000Hz, 15g
Environmental Sealing (mating)	Shell Material		Aluminium Alloy, Stainless Steel	Aluminium Alloy, Stainless Steel	Aluminium Alloy, Stainless Steel	Aluminium Alloy, Stainless Steel	Stainless Steel	Brass
Sea		Electroless Nickel	Yes	Yes	Yes	Yes	Yes - Black, Standard	No
ntal	D	Passivated	No	Yes	Yes	Yes	No	No
mer		Teflon Nickel	No	Yes	Yes	Yes	No	No
ron	nell Plating	Olive Drab Cad	Yes	Yes	Yes	Yes	No	No
Envi	lell P	Zinc Cobalt	No	No	No	No	No	No
	5	Tin Zinc	No	No	No	No	No	No
		Zinc Nickel	Yes-Black	Yes- Black	Yes- Black	Yes- Black	No	No
		Other	Consult Factory	Consult Factory	Selective Plating	Consult Factory	No	Ruthenium
		Layouts	1 to 19	1 to 55	1 to 130	1 to 130	7 to 19	9, 12, 16
	Contact Size		23, 20HD, 16, 12	12, 16, 20HD, 23, 8	12, 16, 20HD, 23, 8	12, 16, 20HD, 23, 8	Spring Pogo & Pad	0.3mm, 0.7mm
	Crimp machined		Yes	Yes	Yes	Yes	No	No
	Crimp stamped		Yes	Yes	Yes	Yes	No	No
	Print Circuit		Yes	Yes	Yes	Yes	Yes	No
S		Solder Cup	Yes	Yes	Yes	Yes	Yes	No
tact		High Voltage	No	No	No	No	No	No
Contacts		High Power	No	No	No	No	No	No
	OctoGig®		No	No	No	No	No	No
	Quadrax		No	No	No	No	No	No
		Twinax	No	No	No	No	No	No
		Fiber Optic	Yes	Yes	Yes	Yes	No	No
		Pogo	No	No	No	No	Yes	No
	H	ermetic/Chip-on-Flex	No	No	No	No	No	No

Cannon		KP M26482 Series I	PV M26482 Series II	KJA/KJB	KJL	КЈ	5015	5015 Firewall	
	2	Standards/Associated Specifications	M26482 VG95328	M26482 VG95328	38999-Style III	38999-Style I	38999-Style II	SAE-AS50151	SAE-AS50151
	М	lax Operating Voltage	1000 VAC	1000 VAC	1250 VAC	1250 VAC	1250 VAC	3500 VAC / 500 V DC	200-3000 VAC rms
Electrical	Dielectric Voltage (at sea level)		2300 VAC	l - 1500 VAC ll - 2300 VAC	2300 VAC	2300 VAC	2300 VAC	15000 V DC	1000-7000 VAC rms
	Curr	rent Rating @40C (MAX)	23A	23A	23A	23A	23A	13A-150A	13-150A
		EMI / RFI Shielding	Yes	Yes	Yes	Yes	Yes	No	No
	Wi	ire Gauge Range AWG	24 to 16	24 to 12	28 to 8	28 to 8	28 to 8	16 to 0	0-20 AWG
<u>–</u>		Mating cycles (max)	500	5	500	500	250	250	100
anic		Type of Coupling	Bayonet	Bayonet	Triple Thread	Bayonet	Bayonet	Threaded	Threaded
Mechanical	Styles		Straight Plug, 90° Plug. Box, Wall Mount, Inline Jam-nut, TBF Receptacles	Straight Plug, EMI plug. Wall Mount, Box, Jam-nut, Inline Receptacles.	Straight EMI plug. Box, Wall Mount, and Jam-nut Receptacles	Straight Plug EMI Plug. Wall Mount, Jam-nut, Box, Inline Receptacles	Straight EMI Plug. Wall Mount and Jam-nut Receptacles	Straight Plug. Wall Mount and Jam-nut Receptacles	Box Mount, Straight Plug
	En	viron. Sealing (mating)	Per M26482	Per M26482	Per M38999	Per M38999	Per M38999	Per MIL-5015	Exceeds M5015
	Operating Temp		-55°C to 125°C	-55°C to +200°C	-65°C to 200°C	-65°C to 200°C	-65°C to 200°C	-55°C to +125°C	-55°C to +177°C
	Shock Test (g's)		50	10	300	300	300	500	100
iting)	Max Vibration Resistance		200 m/s² (20 g´s) rms	200 m/s² (20 g´s) rms	Per M38999	Per M38999	Per M38999	10 - 500 Hz @ 10g's max	15 Hz @ 10g's max
ironmental Sealing (mating)	Shell Material		Aluminium Alloy	Aluminium Alloy	Aluminium Alloy, Composite, Stainless Steel	Aluminium Alloy, Stainless Steel	Aluminium Alloy, Stainless Steel	Aluminium Alloy	Stainless Steel
al Se		Electroless Nickel	Yes	Yes	Yes	Yes	Yes	Yes	No
enta		Passivated	Yes	No	Yes	Yes	Yes	No	No
muc	_	Teflon Nickel	No	No	Yes	No	No	No	No
Enviro	iting	Olive Drab	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ш	Shell Plating	Cadmium	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	She	Zinc Cobalt	Black & Green	No	Black & Green	No	No	Yes	No
	-	Tin Zinc	Yes	No	No	No	No	No	No
	-	Zinc Nickel	Yes	No	Black	No	No	No	No
		Other	Blue Gen	No	No	No	No	No	No
	Layouts		2 to 61	3 to 61	3 to 128	3 to 128	3 to 128	1 to 85	2-47
	Contact Size		16 to 20	12 to 20	8 to 22	8 to 22	8 to 22	0-16	0-16
	Crimp machined		Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Crimp stamped		No	No	No	No	No	Yes	No
		Print Circuit	Yes	Yes	Yes	Yes	Yes	Yes	No
ts	Solder Cup		Yes	No	No	No	No	Yes	No
Contacts	High Voltage		No	No	Yes	Yes	Yes	Yes	Yes
Ğ	High Power		No	No	Yes	Yes	Yes	Yes	Yes
	OctoGig®		No	No	Yes	Yes	Yes	No	No
		Quadrax	No	No	Yes	Yes	Yes	No	No
		Twinax	No	No	Yes	Yes	Yes	No	No
		Fiber Optic	No	No	Yes	Yes	Yes	No	No
		Pogo	No	No	No	No	No	No	No
	Н	lermetic/Chip-on-Flex	Yes	Yes	Yes	Yes	Yes	No	No

Electrical

Mechanical

Environmental Sealing (mating)

Contacts

	Nano	Micros / MDM M83513	Micros / MDM High Temp	D-Sub Combo	D-Sub D*MA / D*MM	D-Sub GD/Space Grade
				E BARREN	Constant P	
Associated Specifications	MIL-DTL-32139 Style	MIL-DTL-83513	MIL-DTL-83513	UL	M24308, UL	M24308, UL, NASA S311P
Max Operating Voltage	200 VAC	200 VAC	200 VAC	500 VAC	500 VAC	500 VAC
Dielectric Voltage (sea level)	250 VAC	600 VAC	600 VAC	1250 V AC	1500 V AC	1500 V AC
Max Current Rating @40C	1A	ЗA	ЗA	7.5 A- 40A	5A - 7.5 A	5A - 7.5 A
EMI / RFI Shielding	No	Yes	Yes	No	No	No
Wire Gauge Range AWG	30 - 32	24 to 26	24 to 26	30 to 8	30 to 8	18 to 26
Mating cycles (max)	500	500	500	50, 200, 500	500	500
Type of Coupling	Screwlock, Jackpost	Screwlock, Jackpost	Screwlock, Jackpost	Screwlock, Jackpost	Screwlock, Jackpost	Screwlock, Jackpost
Environmental Sealing (mating)	48 hour salt spray, per EIA-364-26, B	Method 1002, Type II, omit steps 7a & 7b	Yes	No	No	IP67
Operating Temperature	-55°C to +125°C	-65°C to +125°C	-65°C to +200°C	-55°C to 125°C	-55°C to +125°C	-55°C to +125°C
Shock Test (g's)	100g's per EIA-364-27M (G)	20 G's, 10-20,000 Hz. 12 hrs	20 G's, 10-20,000 Hz. 12 hrs	Per M24308	Per M24308	Per M24308
Max Vibration Resistance	20g's	Per M83513	Per M83513	Per M24308	Per M24308	Per M24308
Shell Material	Aluminum Alloy Steel	Aluminum Alloy, Steel	Aluminum Alloy	Carbon Steel, Stainless Steel	Carbon Steel, Stainless Steel	Stainless Steel, Brass
Shell Plating	Cadmium, Electroless Nickel	Cadmium, Electroless Nickel	Cadmium, Electroless Nickel	Zinc, Cadmium, Passivated Gold, Nickel	Zinc, Cadmium, Passivated Gold, Nickel	Passivated Gold, Nickel
Layouts	9, 15, 21, 25, 31, 37, 51	9, 15, 21, 25, 31, 37, 51, 69, 100	9, 15, 21, 25, 31, 37, 51, 69, 100	2WK2, 3W3, 3WK3, 5W5, 8W8	9,15, 25, 26, 37,44, 50, 62, 78, 104	9, 15, 25, 37, 50
Contact Size	30, 32	24	24	20, 8	20, 22	20, 22
Crimp machined	Yes	Yes	Yes	Yes	Yes	Yes
Crimp stamped	No	No	No	Yes	No	No
Print Circuit	Yes	Yes	Yes	Yes	Yes	Yes
Solder Cup	No	Yes	Yes	Yes	Yes	Yes
High Voltage	No	Yes	Yes	Yes	Yes	Yes
High Power	No	No	No	Yes	Yes	Yes
OctoGig®	No	No	No	No	No	No
Quadrax	No	No	No	No	No	No
Twinax	No	No	Yes	Yes	No	No
Fiber Optic Pogo	No	No	No	Yes No	No	No
Hermetic/Chip-on-Flex	No	Yes	Yes	Yes	Yes	Yes
nermetic/emp-on-riex	NU	1 65	165	165	1 62	1.62

		D-Sub 2D Double Density	RPR	BKA / SGA ARINC 600	DPX ARINC 404	DPK	DPA	
		1						
	Associated Specifications	M24308	EN4165, ARINC 809	ARINC 600	ARINC 404	83733- Style		
	Max Operating Voltage	1000 VAC	500VAC	300VAC	300VAC	600VAC	1450 VAC	
Electrical	Dielectric Voltage (sea level)	1300VAC rms	1300VAC rms	BKA- 1500VAC SGA - 1000VAC	1000VAC Test	1800VAC Test	1000V Test	
Elect	Max Current Rating @40C	5 A max. 2A max. (BR Series)	13A	100A	7.5A	30A	30A	
	EMI / RFI Shielding	No	Yes	Yes	Yes	Yes	Yes	
cal	Wire Gauge Range AWG	8 to 26	PCB Only	6 to 26	20 to 22	26 to 12	26 to 12	
Mechanical	Mating (max)	500	500	500	500	500	500	
Med	Type of Coupling	Screwlock, Jackpost	Latching	Blind Mate	Blind Mate	Blind Mate	Blind Mate	
	Environmental Sealing (mating)	IP67	No	No	No	No	No	
	Operating Temp	-55°C to $+125°C$	-55°C to 175°C	-65°C to $+125^{\circ}C$	-65°C to $+125$ °C	-65°C to $+200°C$	-55°C to 125°C	
iting	Shock Test (g's)	Per M24308	100	Per ARINC 600	Per M81659	Per M83733	No	
Environmental Sealing (mating)	Max Vibration Resistance	200 m/s² (20 g´s) rms	Random: EN 2591-403, Method B, Level G, Spectral density 0.4, Noise 259 m/s2, 8 hrs/ axis	Per ARINC 600	Per M81659	Per M83733	No	
	Shell Material	Low Carbon Steel/ Brass	Composite	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy	
	Shell Plating	Yellow Chromate over Cadmium	Nickel	Chromate, Nickel	Cadmium / Yellow Chromate, Cadmium / Olive Drab	Electroless Nickel	Cadmium / Yellow Chromate	
	Layouts	19, 31, 52, 79, 100	4 to 30	BKA- 800 max SGA - 150 max	424 max	185 max	185 max	
	Contact Size	22	8, 16, 22, 23, 24	8,12,16, 20, 22D	0,4,8,12,16,20, 22D	12, 16, 20, 20D	4, 8, 12, 20	
	Crimp machined	Yes	No	Yes	Yes	Yes	Yes	
	Crimp stamped	No	No	Yes	Yes	Yes	Yes	
	Print Circuit	Yes	Yes	Yes	Yes	Yes	No	
cts	Solder Cup	Yes	No	No	Yes	No	Yes	
Contacts	High Voltage	No	No	No	No	No	No	
Ŭ	High Power	No	No	No	Yes	No	Yes	
	OctoGig®	No	No	Yes	Yes	No	No	
	Quadrax	No	Yes	Yes	Yes	No	No	
	Twinax	No	Yes	Yes	Yes	Yes	No	
	Fiber Optic	No	No	Yes	Yes	Yes	No	
	Pogo	No	No	No	No	No	No	
	Hermetic/Chip-on-Flex	No	No	Yes	Yes	Yes	No	

## **Fiber Optics**



ITT Cannon offers a wide range of custom, end-to-end fiber optic termini, connector savers, connectors, and integrated cable assemblies. Our in-house capabilities allow us to design and manufacture complex systems including single-mode and multi-mode systems and ferrule assemblies.



## **Key Features**

- COTS termini, connectors, and complex cable assemblies
- Flex circuits with simplex termini and MT/MPO connections
- Expanded beam ball and grin lenses
- Expanded connector life with fiber optic, connector saver termini
- Integrated cable assemblies with optional fluid, heat, abrasion, and fire-resistant jacketing system using various materials including ITT's SJS material, - over molded, blown on or extruded conduit or cable system.
- With full integration into ITT Cannon militarygrade interconnects including M29504, D38999, M28876, Jewel, NGCON, Space-Grade Rectangular or Circulars, PHD and ARINC
- Secure system with reduced insertion loss and channel-to-channel variance.

## Cable Assemblies & Backshells

Let ITT Cannon complete your solution with our custom cable products. A complement to the reduction in size of the connectors is the reduction in weight and thickness in cabling. Choose from several available options to help customize your application. Improving on our high reliability connectors, we offer over molds that are suitable for military requirements in harsh environments.



## Braiding

• EMI shielded metal to light weight, textile braiding for abrasion protection

## Overmolding

- Injection molding with poly ureaurethane, Santoprene, and polyimide
- Transfer molding with Cannon's Super Jacketing System (SJS Series), Viton, Neoprene, EPDM, and alternative molding compounds
- Low pressure and prototype molding including M24041, poly ureaurethane, Polyimide, and custom compounds

## **Shrink Boots**

• Customized solution for all connector-to-cable transition type including straight, 90 and 45 degree.

## Backshells

 Integration of commercial and MIL-Spec backshell and molding adapters

## **Cable Jacket**

- Blown-on jacketing for multi leg cables using SJS jacket, Viton Neoprene, EPDM, and various other tubing jackets
- RONDENT proof extruded jackets using SJS jacket, poly ureaurethane, Santoprene and Neoprene.
- Textile braids and heat shrink jackets

## **Integrated Assembly**

- Integrated connector and cabling into box system
- Ribbon cable assembly
- Cable/Wire harnesses in boxes or as an LRU
- Machined & integrated high volume Die Cast housing

# Micro-Mode Products

## Leading provider of high-bandwidth Radio Frequency (RF) connectors for harsh environment defense and space applications.

For over 40 years Micro-Mode Products has provided the military, aerospace and commercial industries with the high quality components that build superior products. We offer an extensive portfolio of standard or custom RF and Hermetic solutions including adapters, blindmate, threaded, and cable assemblies. Our US manufacturing facility offers complete in-house manufacturing capabilities including engineering and design services, a plating lab, and glass to metal sealing operations. Our industry leading products are matched with competitive pricing and strong turnaround times.

Dedicated to safety and excellence, Micro-Mode has been certified to both the AS9100 Rev D and ISO 9001:2015.



## **Featured Products**



#### **Calibration Kits**

Achieve repeatable measurements and remove uncertainties with Micro-Modes patented blindmate calibration technique.



#### **Adapters**

High-quality RF adapters for gender change or connector saver requirements, 100% tested to insure optimal electrical performance between dozens of coaxial RF connector series.



**Blindmate Connectors** 

From DC to 110 GHz, Micro-Mode manufactures standard and customizable blindmate SMP, SMPM and SMPS connectors qualified to MIL-STD-348..



Locking Blindmate Connectors

Maintain optimal electrical performance in harsh environment and test applications with a secure secondary retention coupling nut.



#### **Threaded Connectors**

Robust standard, hermetic, and custom MIL-STD-348 qualified threaded connectors.



## **Hermetic Products**

Custom electronic solutions and connectors hermetically sealed for RF and DC applications. Micro-Mode ensure dependability in the harshest environments with fine lead testing of all hermetic solutions.



## Terminations

Robust portfolio of threaded or blindmate connectors with 50 Ohm terminations providing limited signal reflection to protect sensitive equipment during test and measurement.



## Attenuators

0 to 20 db standard and temperature variable attenuators in both blindmate and threaded configurations used to precisely lower the amplitude of a signal a fixed amount. Connect with your ITT Cannon representative today or visit us at www.ittcannon.com

## Connect with the experts

ITT Cannon is a world leader in the design and manufacture of highly engineered solutions for global aerospace, space, and defense markets.



## Why ITT

ITT is a focused multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions. ITT's Cannon brand is a leading global manufacturer of connector products serving international customers in aerospace, defense, medical, industrial and transportation end markets. ITT's Connector business, which also includes the Cannon, Veam, and Micro-Mode brands, manufactures and supplies a variety of connectors and interconnects that make it possible to transfer data, signal and power in an increasingly connected world.

#### Connect with your ITT Cannon representative today or visit us at www.ittcannon.com

CHINA - Shenzhen City	GERMANY - Weinstadt	<b>ITALY - Lainate</b>	<b>KOREA</b>	<b>SHANGHAI</b>	<b>UK - Basi</b>
+86.755.2726.7888	+49.7151.699.0	+39.02938721	+82.2.702.7111	+ 86.21.2231.2222	+44.1256
FRANCE	HONG KONG	<b>JAPAN - Kanagawa</b>	MEXICO - Nogales	<b>SINGAPORE</b>	<b>USA - Irvi</b>
+33.1.60.04.93.93	+852.2732.2720	+81.462.57.2010	+52.631.311.0050	+65 66974205	+1.800.8

singstoke 56.347400 rvine, CA .854.3028

The "ITT Engineered Blocks" symbol, "Engineered for life", "ITT" and "Cannon" are registered trademarks of ITT Inc.

Specification and other data are based on information available at the time of printing, and are subject to change without notice.

