



CPE LINECARD

YOUR PARTNER
IN TECHNOLOGICAL
DEVELOPMENT



Table of Contents

COMPANY HISTORY AND NEW TARGETS4

RF COMPONENTS & CABLES8

CIRCULAR CONNECTORS10

RECTANGULAR CONNECTORS11

RECTANGULAR AND CIRCULAR BACKSHELLS12

OPTICAL COMPONENTS14

FIBER MANAGEMENT SOLUTIONS15

INTEGRATED SYSTEMS16-17

Type of product

1 2 3 4 5 6 7 8 9

10 11 12 13 14 15 16 17

18 19 20 21 22 23 24 25

26 27 28 29 30 31 32 33

34 35 36 37 38 39 40 41 42

43 44 45 46 47 48 49

50 51 52 53

Company History and new Targets

CPE is a family company founded in 1978 and established in Milan, Italy.

The business started as a trading company of connectors and cables, addressing defense and telecommunication.

After a few years of activity, moving from a trading to a manufacturing company was an organic and natural progression, thus pursuing high specialization in harness assembly and connector production. Since the spirit of CPE ITALIA has always been and always will be to assist the "client ally", constant growth was sustained by the founder of the company by opening new production sites all over the world. CPE ITALIA is now a Group of about 400 people with production facilities in Brazil, China, Italy, Mexico, Romania, branch offices in North America and India, headquarters in Milan.

With profound knowledge of and years of experience in multiple sectors like Defense, Broadcasting, Communication Infrastructure, Medical, Transportation, Nuclear, Oceanographic Installations, CPE supports its client-focused ideology with the development of solutions tailored to each client's needs.



We like to imagine our behavior and capability results similar to these of the well known
"Tricolor Arrows" pilot team:

attentive to the rules	→	guidelines, organization and discipline
total security as top priority	→	quality
amaze and engage	→	Innovation and results that exceed customer expectations



40 YEARS

INSIDE CONNECTIVITY MARKET







RF COMPONENTS & CABLES



Market Interconnect Technology	1	Broadcast Military Telecom	2	Broadcast Military Telecom	3	Broadcast Military Telecom	4	Broadcast Military Telecom	5	Testing
Type		Coaxial Flange Connectors		Coaxial Connectors		Coaxial Connectors		Coaxial Connectors		Precision Coaxial Adapters up to 60 GHz
Mounting		Cable Clamp / Solder		Cable clamp / Solder / Crimp		Cable clamp / Crimp / Solder / Panel		Cable clamp / Crimp / Solder / Panel		Straight / Panel
Shell Materials		Brass		Brass		Brass/Stainless Steel		Brass/Stainless Steel		Stainless steel
Insulator Material		PTFE		PTFE		PTFE		PTFE / ULTEM		PTFE / ULTEM
Contacts Technology		clamp/Solder		clamp/Solder		crimp/clamp/Solder		crimp/clamp/Solder		Precision machined
Environmental		water proof		water proof		water proof		---		---
Specifications *		EIA STD RS-225 MIL-DTL-24044 *		MIL 39012 DIN VG CECC IEC *		MIL 39012 DIN VG CECC IEC *		MIL 39012 DIN VG CECC IEC *		MIL 39012 DIN VG CECC IEC *
Rohs		Yes		Yes		Yes		Yes		Yes
Family		Coaxial Connectors		Coaxial Connectors		Coaxial Connectors		Coaxial Connectors		Coaxial precision adapters
Series / Interface		Eia 3-1/8 - Eia 1-5/8 - Eia 7/8- From Rg 401 To Rg 214 And Lmr Style And Corrugated Cable From 1/4" To 1 5/8"		7/16-4,1/9,5-4,3/10-N- Nex10 /2,2-5		BMA-SMP-SMA- SMB-SMC-SSMC -MCX-MMCX-1,0/2,3- 1,6/5,6-BNC 50/75 Ohm-TNC-UHF -PC7-- SC-LC-N-		Mini SMP-3,5mm- 2,92mm-2,4 mm - 1,85 mm		SMP-Mini SMP-MCX- MMCX-SMA-3,5mm- 2,92mm-2,4MM-PC7- SMA-BMA-SMB-TNC-

* Made in accordance with



SEE NEXT PAGE

Market Interconnect Technology	6	Broadcast Military Railway Telecom Trasportation	7	Military Telecom Testing	8	Broadcast Military Telecom	9	Broadcast Military Telecom
Type		Coaxial Corrugated Copper Cable / Radiating Cable		Precision Radio Frequency / Microwave cable assemblies		Flexible Cable / Hand Formable / Semirigid / low loss / polyethylene foam dielectric		Antenna System / Site Solutions
Mounting		Jumper - Feeder - Radiating Line		Flexible, Reformable and Semirigid		---		Cable clamp / Crimp / Solder / Panel
Shell Materials		Corrugated Copper		copper tube / copper braid / Stainless steel / Armored		copper braid		Brass/Stainless Steel
Insulator Material		Physically Foamed PE		PTFE / expanded PTFE		PE / PTFE		PTFE / Ultem
Contacts Technology		---		Crimp / Clamp / Solder		stranded / solid copper central conductor		crimp/clamp/Solder
Environmental		CPR		YES / NO		CPR		---
Specifications *		MIL STD		MIL STD 81490		---		---
Rohs		Yes		Yes		Yes		Yes
Family		Coaxial Cables for field application		Coaxial Cables		Coaxial Cables		Coaxial connectors / Coaxial cables/ Coaxial accessories
Series / Interface		1/4" - 1/2" - 1/2 SFLX - 3/8" 7/8" - 1_5/8"		Low Loss / Ultra Low loss / Phase Stable / Flexible / Ultra Flexible cables		RG Style / Tin Dipped Copper Braid / Copper - Aluminum Tube		Ground kit - Lighting protector - Wall entry jumper - Feeder cables

* Made in accordance with



RF jumper cable
assemblies

Connectors antenna
male or female

Ground clamps

Cable hangers

Feeder cables

Wall entries

Connectors TX/RX
male or female

RF jumper cable
assemblies

Over voltage
protections



CIRCULAR CONNECTORS



Market Interconnect Technology	10	Industrial	11	Industrial	12	Medical Robotic Test & Measurement	13	Medical Test & Measurement
Type		Screw Bayonet Push lock		Screw M5-M8-M10-M12		Push Pull		Push Pull
Mounting		Free Cables, PCB, Panel		Free Cables, PCB, Panel		Free Cables, PCB, Panel		Free Cables, PCB, Panel
Shell Materials		Plastic		Brass		Aluminum, Stainless Steel		PSU
Insulator Material		PA PPU		PA PPU		PEEK		PEEK
Contacts Technology		Precision Machined Standard PCB, Solder		Precision Machined Standard PCB, Solder		Precision Machined Standard Crimp, Pcb, Solder		Precision Machined Standard
Environmental		IP65 / IP68		IP65 / IP67		IP65 / IP68		IP50 / IP67
Specifications *				DIN-EN61076				
Rohs		YES		YES		YES		YES
Family		CICC		CICC		OFL		OFLP
Series		CICC Plastic		CICC Metal		L, K, F.		----

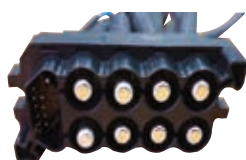
* Made in accordance with



Market Interconnect Technology	14	SDR Radio Connectors and Cables 55 Ways	15	Aerospace Military	16	Off Shore Renewable energies Subsea Underwater	17	Military Subsea
Type		Screw & Quick Disconnect		Ultraminiature Circular Push Pull Break - Away Fast clean		Under Water		Special
Mounting		Free Cables, PCB, Panel		Free Cables, PCB, Panel		PHP, Plug, Receptacle and In line connectors		Free Cables, PCB, Panel
Shell Materials		Aluminum, Stainless Steel		Aluminum, Stainless Steel		Stainless Steel, Marine Bronze, Titanium		Stainless Steel, Marine Bronze
Insulator Material		PPS		PEEK		PPS PEEK CR POM NEOPRENE		PPS / GLASS
Contacts Technology		Precision Machined Hyperboloid (Pin contacts diameters 0.6mm)		Precision Machined, Spring Loaded		Precision Machined, Optical, Coax		Precision Machined, Optical, Coax
Environmental		IP68		IP68		Water Pressure Resistant		Water Pressure Resistant
Specifications *						VG85519		STD-MIL
Rohs		YES		YES		YES		YES
Family		CMCC		CMC				
Series				A, B, C, D, E Z, Y, X, W, V.		10, 16, 22, 24, 27, 34, 35 40, 42, 51, 60, 61, 64, 80.		

* Made in accordance with

RECTANGULAR CONNECTORS



Market Interconnect Technology	18 Industrial	19 Industrial Railways Transportation Testing	20 Industrial Military	21 Aerospace Military
Type	Power > 100A connectors	Modular for rack and panel applications	Rectangular D-Sub / COMBO / HD	Rectangular Micro -D
Mounting	Free Cables, PCB, Panel	Free Cables, PCB, Panel	Free Cables, PCB, Panel	Free Cables, PCB, Panel
Shell / frame Materials	Plastic, Metal & composite	Aluminum, Stainless Steel, 180° - 90° - 45°	Brass, Stainless steel	Aluminum, Stainless Steel, Titanium
Insulator Material	PBT	Polyamide-glass PPS	DAP PBT Polyester	PPS LCP
Contacts Technology	Precision Machined standard. Crimp / Solder	Precision Machined Hyperboloid. Crimp, Pcb, Solder	Precision Machined & stamped. Crimp, Pcb, Solder	Precision Machined Twist contacts. Pcb, Solder, Wired & Rigid flex
Environmental	NO	NO	YES/NO	YES/NO
Specifications *		STD-MIL	MIL-DTL-24308	MIL-DTL-83513
Rohs	YES	YES	YES	YES
Family	CIRC	DMC 5.5	CDSub	CMicro
Series	CIRC	C, D, E, F, G - H, K, WZ, ZX	CDS	CM

* Made in accordance with



Market Interconnect Technology	22 Aerospace Military	23 Aerospace Military	24 Aerospace Military	25 Aerospace Military
Type	Rectangular Nano-D	High Performance Rectangular Connectors	PCB Rectangular Connectors	Back Plane Rectangular Connectors
Mounting	Free Cables, PCB, Panel	Free Cables, PCB, Panel	Free Cables, PCB, Panel	PCB
Shell / frame Materials	Aluminum, Stainless Steel, Titanium.	Aluminum, Stainless Steel, Titanium.	Aluminum, Stainless Steel, Titanium.	Aluminum, Stainless Steel
Insulator Material	PPS LCP	PPS PEEK LCP	PPS PEEK LCP	PPS PEEK LCP
Contacts Technology	Precision Machined Twist contacts. Pcb, Solder, Wired & Rigid flex	Precision Machined, Spring Loaded. Crimp, Pcb, Solder Wired & Rigid flex	Precision Machined Hyperboloid. Crimp, Pcb, Solder. (Pin contacts diameters 0.4mm - 0.5mm - 0.6mm)	Precision Machined Hyperboloid. Pcb & Rigid flex. (Pin contacts diameters 0.4mm - 0.5mm - 0.6mm)
Environmental	YES/NO	YES/NO	YES/NO	YES/NO
Specifications *	MIL-DTL-32139	MIL-DTL-55302	MIL-DTL-55302	MIL-DTL-55302
Rohs	YES	YES	YES	NO
Family	Cnano	HDC	HDC	C55302
Series	CN	SL	HP	C55302

* Made in accordance with

RECTANGULAR AND CIRCULAR BACKSHELLS

RECTANGULAR BACKSHELLS



Market Interconnect Technology	26 Industrial Transportations	27 Aerospace Military	28 Aerospace Military	29 Aerospace
Designed For	D-Subminiature MIL-C-24308	Micro-D COTS MIL-DTL-83513	Nano-D COTS MIL-DTL-32139	ARINC Series 400 and Series 600 Connectors
Production	Stamped	Precision machined	Precision machined	Precision machined
Shell Materials	Die Cast Zinc Plastic	Aluminum Stainless Steel	Aluminum	Aluminum Stainless Steel
Finish	-----	Electroless Nickel High Phosphorus Nickel 500 h Black Zinc Nickel	Electroless Nickel High Phosphorus Nickel 500 h Black Zinc Nickel	Electroless Nickel Olive Drab Black Zinc Nickel
EMI/RFI	YES/NO	YES	YES	YES
Environmental	NO	NO	NO	NO
Specifications *				AS85049
Rohs	YES	YES	YES	YES / NO
Family	CRB	CRB	CRB	CRB
Series	CDH	CMH	CNH	C4H C6H

* Made in accordance with

CIRCULAR BACKSHELLS



Market Interconnect Technology	30 Aerospace Industrial Military	31 Aerospace Industrial Military	32 Aerospace Industrial Military	33 Aerospace Military
Designed For	Circular Mil-Spec Connectors	Circular Mil-Spec Connectors	Circular Mil-Spec Connectors	Circular Mil-Spec Connectors
Production	Precision machined	Precision machined	Precision machined	Precision machined
Shell Materials	Aluminum Stainless Steel	Aluminum Stainless Steel	Aluminum, Stainless Steel	Aluminum
Finish	Electroless Nickel Olive Drab Black Zinc Nickel	Electroless Nickel Olive Drab Black Zinc Nickel	Electroless Nickel Olive Drab Black Zinc Nickel	Electroless Nickel Olive Drab Black Zinc Nickel
EMI/RFI	NO	YES/NO	YES	YES
Environmental	YES	YES	YES	NO
Specifications *	AS85049	AS85049	AS85049	AS85049
Rohs	YES / NO	YES / NO	YES / NO	YES / NO
Family	CCB	CCB	CCB	CCB
Series	---	---	---	---

* Made in accordance with

Our production techniques and knowledge
in the coaxial sector respond to all market needs



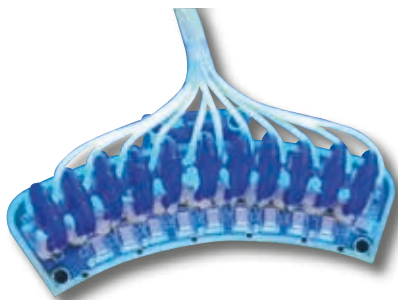
also for multi-wire cable harnesses we are able to offer
a wide range of solutions to meet customer needs



we are able to create assembled cables that simultaneously use coaxial,
signal, optical and power materials, also respecting
the critical environmental design problems



By taking advantage of the PCBa line, we are able to provide further solutions



OPTICAL COMPONENTS



Market Interconnect Technology	34 Broadcast Military Telecom Railway	35 Broadcast Military Telecom Railway	36 Broadcast Military Telecom Railway	37 Broadcast Military Telecom Railway	38 Broadcast Military Telecom Railway
Type	Optical cable Indoor / Outdoor	Optical Connectors	Optical adapter SX/Dx/Quad	Optical attenuator	Optical reflector
Model	Singlemode OS2 Multimode OM1-OM2-OM3-OM4-OM5	Singlemode UPC/APC Multimode PC	Singlemode Multimode	Singlemode Multimode	Singlemode (FTTH Network)
Materials	Sheath: PVC / PE / LSZH CPR (Eca - Cca - B2ca)	Plastic or metal	Plastic or metal	Plastic or metal	Plastic
Environmental	YES	YES	YES	YES	YES
Specifications *	IEC 60794	IEC 61754	IEC 61754	IEC 61754	IEC 61754
Interface		SC - FC - LC - E2000 ST - MPO	SC - FC - LC - E2000 ST - MPO	SC - FC - LC	SC
Rohs	YES	YES	YES	YES	YES
Family	COF	COF	COF	COF	COF

* Made in accordance with



Market Interconnect Technology	39 Broadcast Military Telecom Railway	40 Broadcast / Military Telecom / Railway	41 Broadcast Military Telecom Railway	42 Broadcast Military Oil & Gas Telecom
Type	Optical patchcord SX or DX Pigtail Optical Breakout cable Optical Fan-out cable	Mpo Connectors & Boots	Optical Termini Connectors and Cables	Expanded Beam Connectors & Assemblies
Model	Singlemode OS2 Multimode OM1-OM2-OM3-OM4-OM5	Singlemode Multimode	Singlemode Multimode	Singlemode Multimode
Materials	Sheath: LSZH	Plastic	Metal	Plastic or metal
Environmental	YES	NO	YES	YES
Specifications *	IEC 60794 IEC 61754	IEC 61754-7	M29504/4 - M29504/5 - M29504/14 - M29504/15	MIL-DTL-83526
Interface	SC - FC - LC - E2000 ST - MPO	MPO 12 MPO 24 MPO 32	MIL-DTL-38999 - MIL-C-26482 - ARINC - MIL-PRF-28876 - DFOCA -	MINI - JUNIOR - SENIOR COMPATIBILITY WITH (Fibreco - Qpc Tyco - Amphenol Telecast - Fibreco)
Rohs	YES	YES	YES - NO	YES - NO
Family	COF	COF		

* Made in accordance with

FIBER MANAGEMENT SOLUTIONS



Market Interconnect Technology	43 Telecommunication	44 Telecommunication	45 Telecommunication	46 Telecommunication
Type	Optical Termination Box Indoor / Outdoor	Optical Termination Panel Indoor	Fiber Distribution Closure Outdoor	Fiber Termination Closure Outdoor
Model	PTE 24/36/48 f.o.	19" or ETSI rack mounted complete for 48 f.o. with SC connectors	FDC AA (max 432 f.o.) FDC AB (max 1008 f.o.) FDC AC (max 1440 f.o.)	FTC (max 48 SC connectors) (max 216 f.o.)
Materials	Plastic	Plastic and metal	Plastic and metal	Plastic and metal
Environmental	YES	YES	YES	YES
Specifications *	EN 50411-3-4 EN 50411-3-2	IEC 61753-1-2	IEC 60529 (IP68) IEC 61300-3-1 IEC 61300-2-33	IEC 60529 (IP68) IEC 61300-3-1 IEC 61300-2-33
Interface		SC/UPC SC/APC		SC/UPC SC/APC
Rohs	YES	YES	YES	YES
Family	COF - FMB	COF - FMD	COF - FDC	COF - FTC

* Made in accordance with

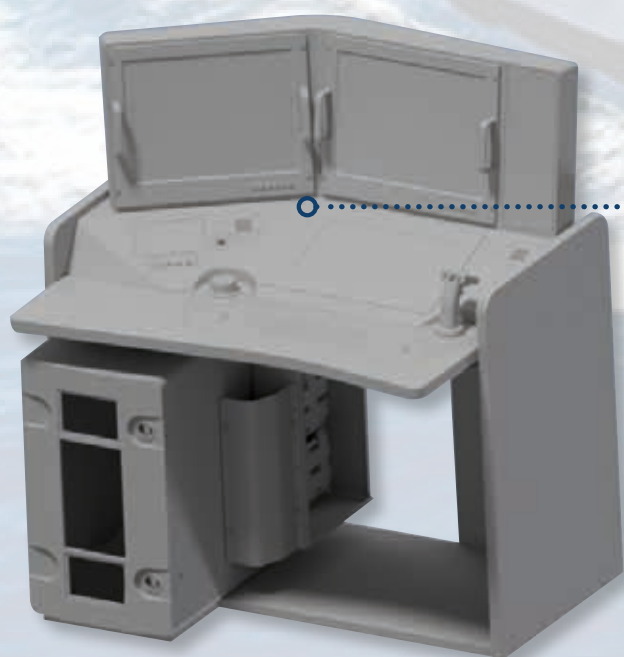
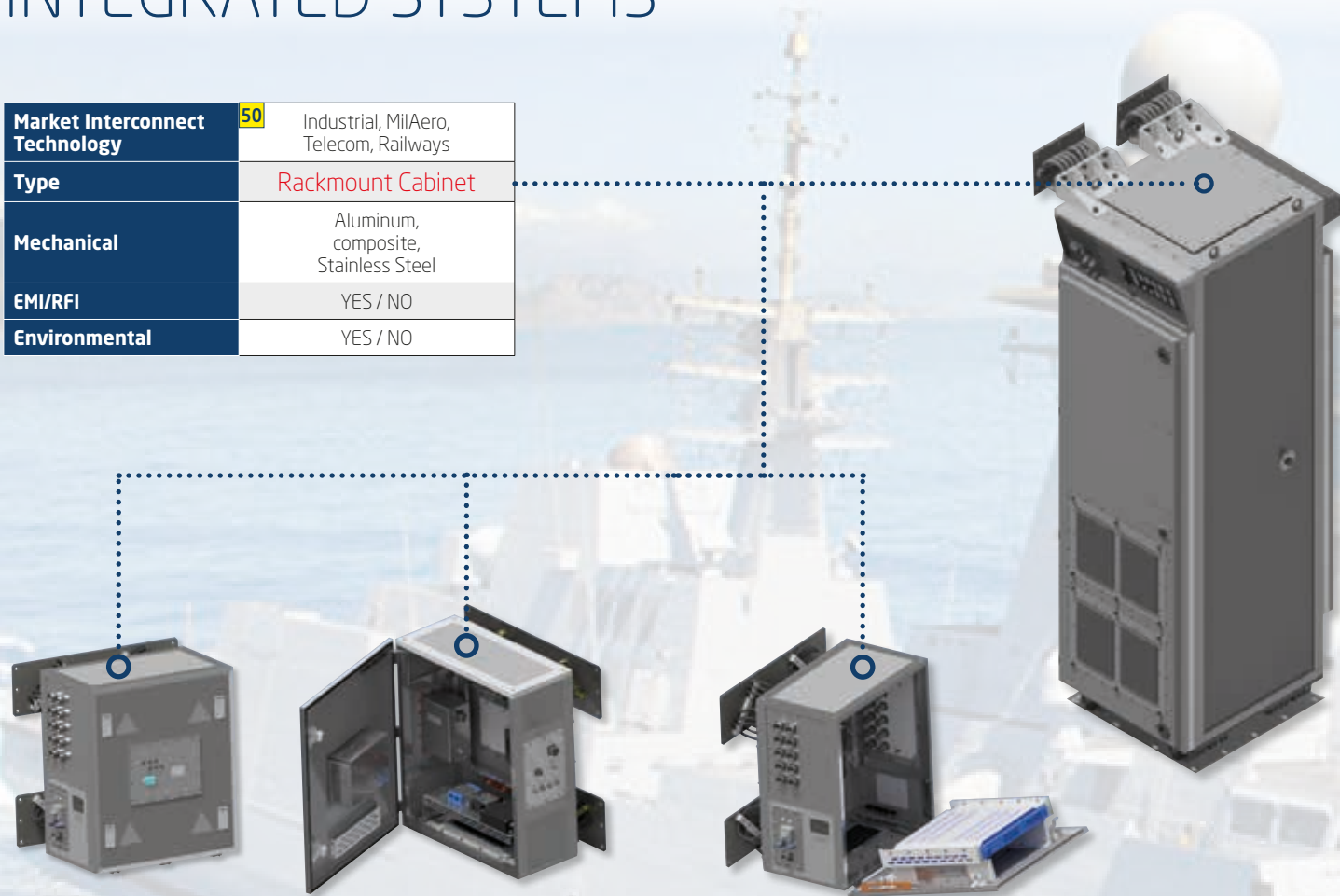


Market Interconnect Technology	47 Telecommunication	48 Telecommunication	49 Telecommunication
Type	Fiber Management Rack	Optical Splitter	Patching Cabinet
Model	FMR ETSI 300 Indoor (2000x600x300)	Singlemode (G657 A1) (1x4 and 1x16)	FPS Outdoor
Materials	Plastic and metal	Plastic	Plastic and metal
Environmental	YES	YES	YES
Specifications *	IEC 61753-1-2	IEC 61753-1	EN 61300-3-1
Interface		SC/APC	SC/APC
Rohs	YES	YES	YES
Family	COF	COF	COF

* Made in accordance with

INTEGRATED SYSTEMS*

Market Interconnect Technology	50 Industrial, MilAero, Telecom, Railways
Type	Rackmount Cabinet
Mechanical	Aluminum, composite, Stainless Steel
EMI/RFI	YES / NO
Environmental	YES / NO

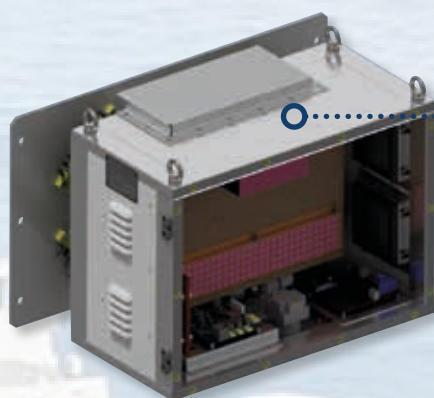


Market Interconnect Technology	51 Industrial, MilAero, Telecom, Railways
Type	Console
Mechanical	Aluminum, composite, Stainless Steel
EMI/RFI	YES / NO
Environmental	YES / NO

*Representative renderings. Photos can be viewed in CPE for security reasons

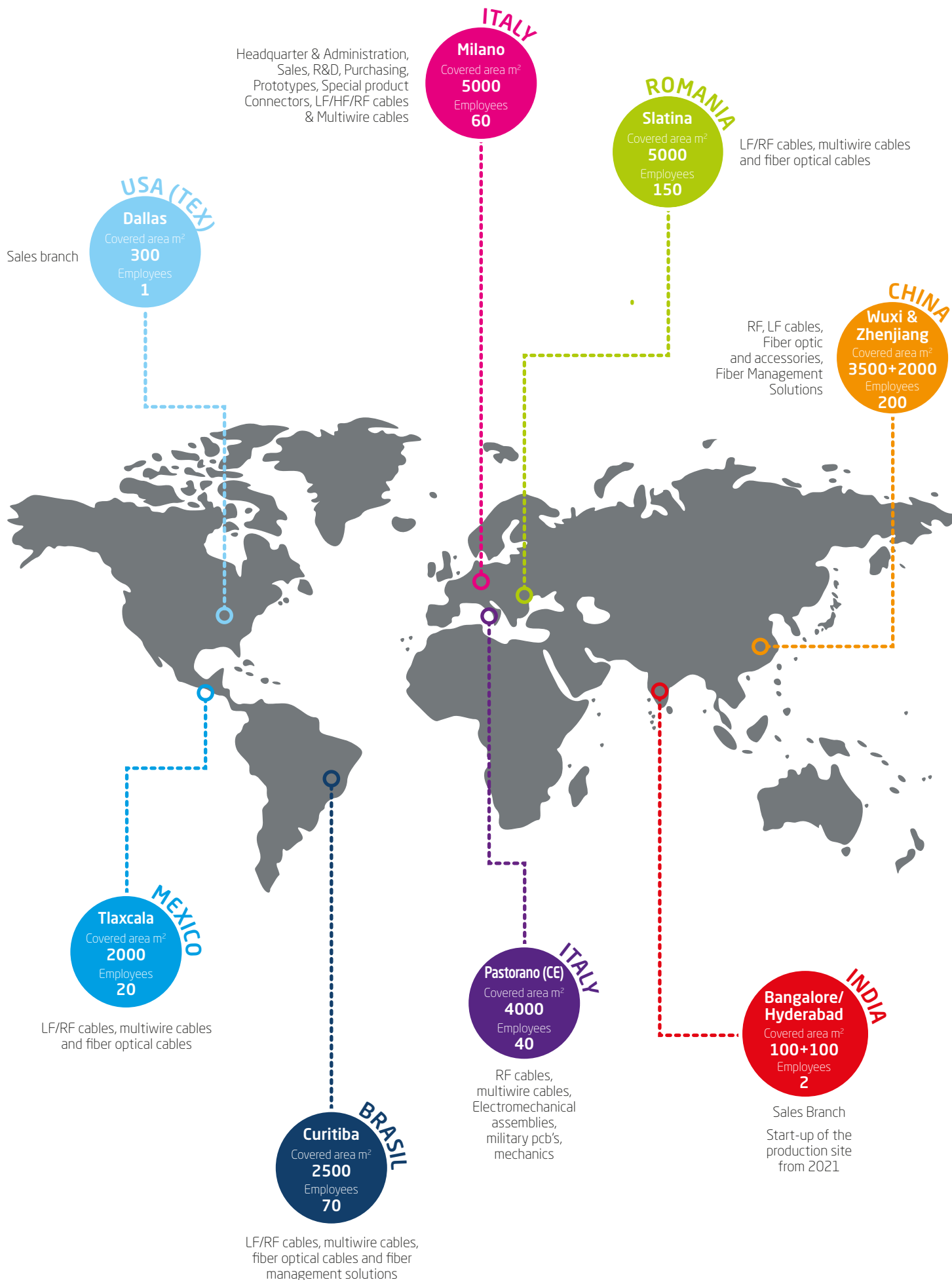
INTEGRATED SYSTEMS*

Market Interconnect Technology	52 Industrial, MilAero, Telecom, Railways, Offshore
Type	Integrated Electromechanical Assembly
Mechanical	Aluminum, composite, Stainless Steel
EMI/RFI	YES / NO
Environmental	YES / NO

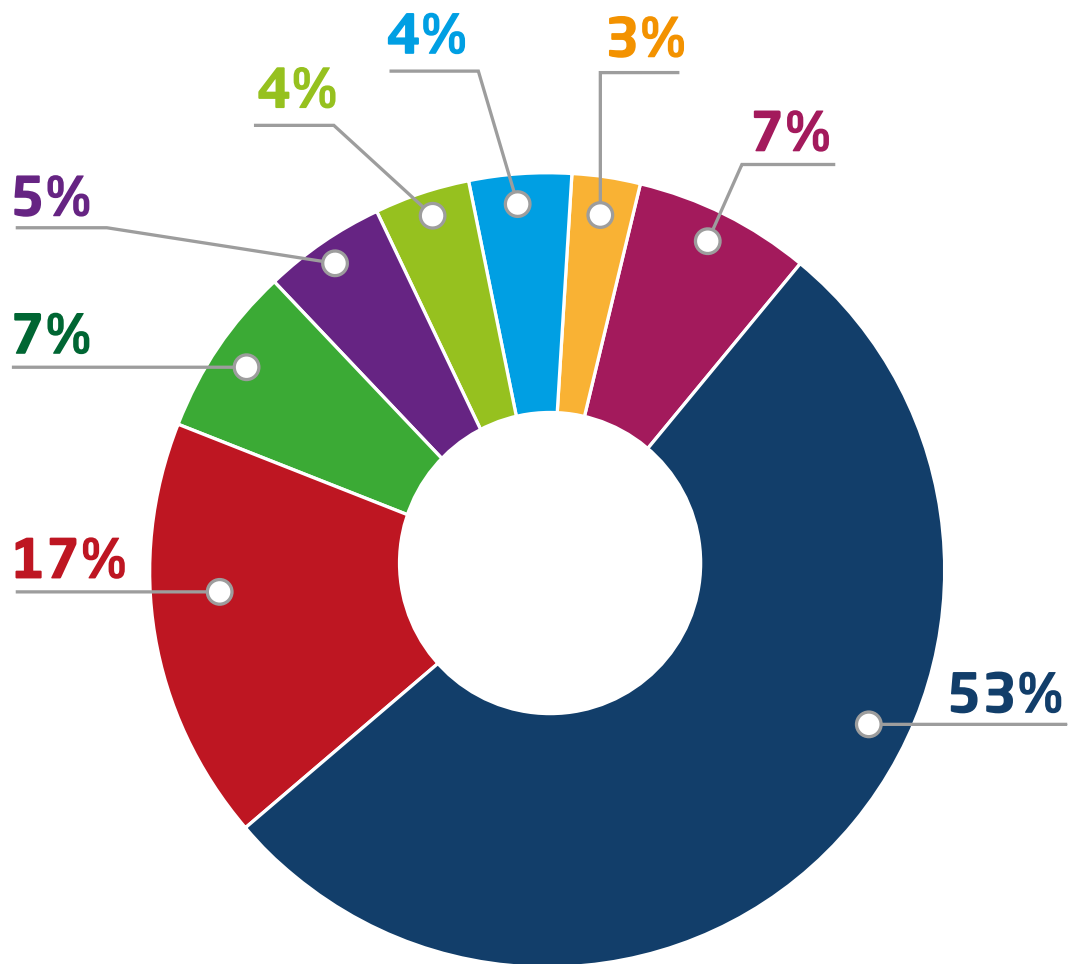


Market Interconnect Technology	53 Industrial, MilAero, Telecom, Railways
Type	Test equipments
Mechanical	Aluminum, composite, Stainless Steel
EMI/RFI	YES / NO
Environmental	YES / NO

*Representative renderings. Photos can be viewed in CPE for security reasons



CPE ITALIA Group Business figures



Communication



Energy



Defense



Oceanographic



Transport



Research institute



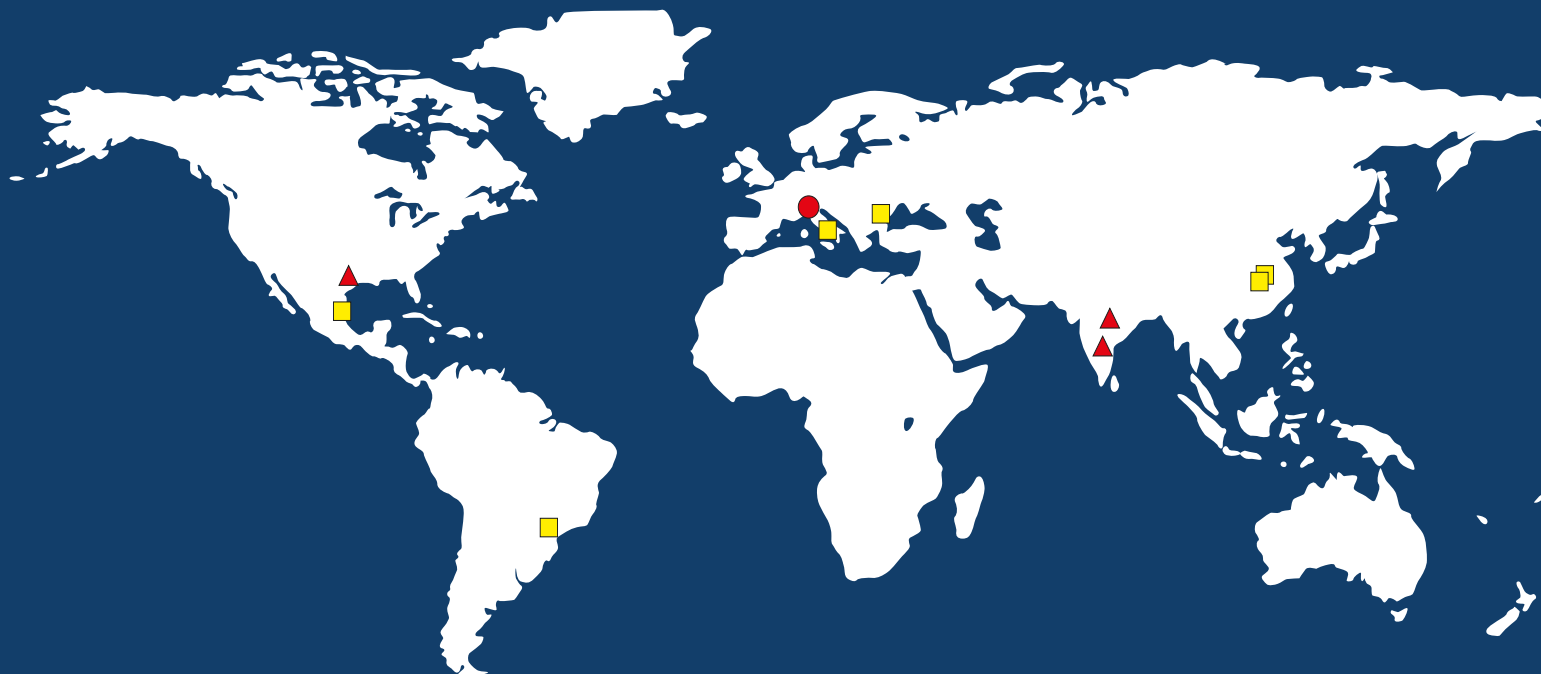
Broadcasting



Others



CPE WORLDWIDE



● **CPE ITALIA SPA (HEADQUARTER)**

Via Chiasserini, 15 - 20157 MILANO - Italy
5000 S.M.
Tel. +39.02.390961 - Fax. +39.02.3570765 - +39.02.3570774
Email: Info@cpeitalia.it
www.cpeitalia.it

■ **CPE East Europe**

Str. Aleea Crinului, 11 - Slatioara - Romania
4000 S.M.
Email: sciarra@cpeitalia.it

■ **CPE Electronica México**

Carretera Apizaco-Tlaxco, Lote 1, Manzana 4, Ciudad Industrial Xicohtencatl 3
2000 S.M.
C.P. 90250, Tlaxco, Tlaxcala
Email: mario.anas@cpemexico.mx

■ **Zhenjiang CPE Electronics Co. Ltd.**

Xindingmao ind. Park in new district
1800 S.M.
212000 Zhenjiang city China

■ **CPE ITALIA SPA (Production Plant)**

Via Torre Lupara Zona Industriale - 81050 PASTORANO (CE) - Italy
3000 S.M.
Email: rocco@cpeitalia.it

■ **CPE do Brasil**

Rua Inaja, 698 - BR83.324.050 Vila E. Pernetá -
2500 S.M.
Curitiba (Pinhais-PR) - Brasil
Email contact: vendas@cpedobrasil.com.br

■ **Wuxi CPE Electronics Co. Ltd**

No.503 Nan Hu Da Dao Nan Chang District, Wuxi City, Jiangsu Province
4500 S.M.
214124 Wuxi City - P.R. China
Email contact: info@cpeitalia.cn

▲ **Commercial Offices**

BANGALORE - INDIA
(Mr. Sanjay - Email contact: sanjay.joshi@cpeitalia.it)
HYDERABAD - INDIA
(Mr. Mohan - Email contact: mohan@rohan-enterprises.com)
TEXAS - U.S.A.
(Mr. Swinger - Email contact: jeff@cpe-nar.com)

