



Automotive Cable & PCB Connector System

Fakra RF Solutions

The Total Solution Provider



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ABOUT SIMULA

Founded in 1990, headquartered in Taiwan, Simula's mission is to lead the component manufacturing industry with deep technical know-how, relentless innovation through R&D and exceptional customer service. Starting as a connector manufacturer, Simula is now a trusted partner of global consumer electronics corporations, and has quality assurance certifications such as ISO13485, IATF16949, ISO9001 and ISO14001. Responding to growing demand from partners, Simula now has presence in the USA, Europe and across Asia, and has also diversified our product offering from manufacturing connectors for the consumer electronics sector, to providing integrated solutions additionally to the Automotive, Medical, Industrial and Marine electronics sectors.

Leveraging our product design experience and manufacturing competency, Simula is able to collaborate with you at each product development phase to create products to meet the needs of tomorrow.



Introduction

Due to the growing demand of autonomous driving, car safety and in-vehicle infotainment of today's automobiles, the market experienced an exponential growth on a variety of connectivity applications, such as blind spot monitoring, lane change assist, emergency braking, parking assist, where higher level of in-vehicle processing power becomes increasingly essential.

With the amount of data coming from various sources, such as sensors and camera surrounding the vehicle as it interacts with its surrounding, the connection for such transmissions need to be secured and reliable to ensure that the driver receives and experience continuous integrated information in real-time.

At Simula, we design and offer automotive grade solutions that fulfill the tough requirements of the industry. Our solutions include straight and angled connectors for PCB mounting applications as well as cable solutions of various lengths to fulfill specific customer needs. The mechanical key features and color coding of the FAKRA connectors prevents mis-mating and allows ease of identification to specific automotive applications.

Application

- Advanced Driver-Assistance Systems
- Infotainment System
- Modules
- Navigation GPS
- Radio Antenna
- Safety and Collision Avoidance Camera
- Sensors
- High Resolution Displays

Qualification

To ensure the quality and standard of the products we provide to our customer who puts their trust in us, Simula is in compliance with International Standards and Industry-related certification

ISO 14001 | ISO 9001 | IATF 16949

Solutions are RoHS Compliant

Features

- Frequency: DC to 2~6 GHz
- Impedance: 50 Ω
- Mechanical Keys and Color Codes:

Item	Code	Application	Color	Plug	Receptacle
1	A	Radio Without Phantom Supply	Black		
2	B	Radio With Phantom Supply	White		
3	C	GPS: Telematics or Navigation	Blue		
4	D	GSM Cellular Phone	Bordeaux		
5	E	TV1/SDARS	Green		
6	F	TV2/SDARS	Brown		
7	G	Remote Control Keyless Entry	Grey		
8	H	Radio Controlled Parking Heating	Violet		
9	I	Bluetooth	Beige		
10	K	Radio with IF	Curry		
11	L	Not Defined	Carmine Red		
12	M	Not Defined	Pastel Orange		
13	N	Not Defined	Pastel Green		
14	Z	Neutral	Water Blue		

Laboratory and Testing

Fully equipped laboratory both in Taiwan and China facilities.



LAB Equipments

Electrical



Milliohm Meter (AC)



Withstand Voltage Tester (AC / DC)



Dual DC Power Supply



High-Resistance Meter



LCR Meter



TDR



Networking Analyzer



Scope Machine



Signal Generator / Counter



Package Loss Test Machine



TELEDYNE LECROY
HDO4054A



Tektronix TBS1102B



BK Precision 9173B



BK Prodigit 3311G



Real-time Spectrum Analyzer (9KHz-6GHz)



Teledyne LeCroy
Mercury T2P Advanced
Analyzer



YOKOGAWA
FX1012 paperless
recorder



THERMO-HUNTER PT-3S

Mechanical



Automatic Inserting /
Pulling Force Tester



Single - Pin Contact
Resistance / Lifetime
Tester



64 - Pin Contact
Resistance / Lifetime
Tester



Cable Bending
Tester



Torque Measurement

Environmental



Thermal Shock Tester



Temperature & Humidity
Chamber



Low Temperature
Chamber



High Temperature
Oven



Salt Spray Test Chamber



Vibration Test System



Steam Ageing Tester



Hot-Air Reflow Machine



Tin Oven



Vertical Profile Projector



Horizontal Profile Projector



30X to 350X Measuring Microscope



2.5D CCD



X Ray Fluorescence Spectrometer (ROHS)



X-Ray Plating Thickness Tester



Hardness Meter



Height Gauge



X-ray Inspection System



Waterproof Tank





Waterproof air Tightness Tester (100Kpa / 5ATM)

Inspection and Verification

Product Solutions

Straight Top-Mount Plugs

	Part No.	Length (mm)	Width (mm)	Height (mm)	Metal Housing	Coding Available
	RP101F	17.5	9.5	11	Brass	A,B,C,D,E,F,G,H,I, K,Z
	RP101D	16.8	9.5	7.5	Brass	A,B,C,D,E,F,G,H,I, K,L,M,N, Z

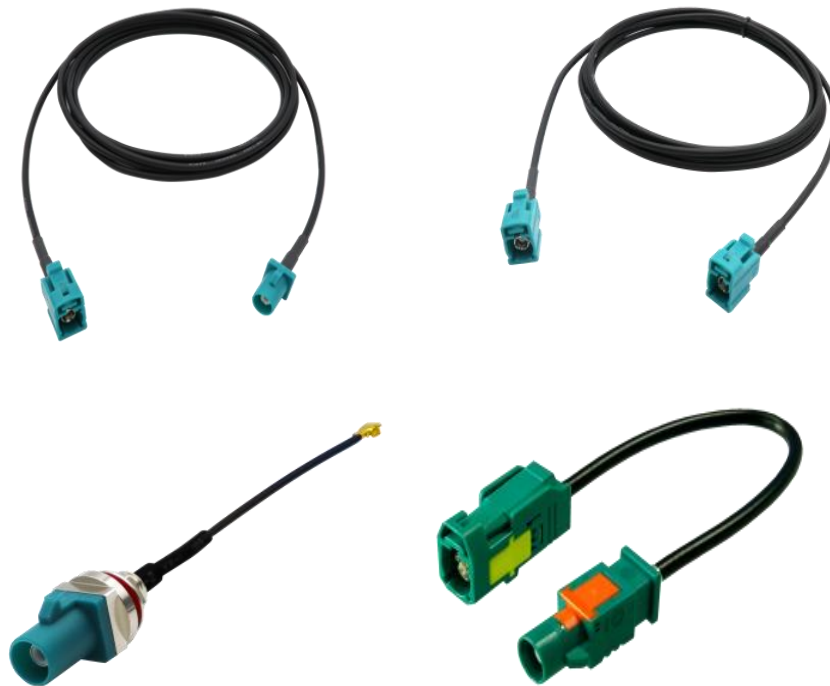
Right Angle Top-Mount Plugs

	Part No.	Length (mm)	Width (mm)	Height (mm)	Metal Housing	Coding Available
	RP101H	20	9.5	9.5	Brass	A,B,C,D,E,F,G,H,I, K,Z
	RP101E	23.95	8.85	9.8	Brass	A.B.C.D.E.F.G.H.I, K,L,M,N,Z

Right Angle Receptacle

	Part No.	Length (mm)	Width (mm)	Height (mm)	Metal Housing	Coding Available
	RP101G	22.3	9.4	13.6	Brass	A,B,C,D,E,F,G,H,I, K,Z

Cable Assembly



Various cable assemblies can be requested from common Adapter Cable and Extension Cable to customized solutions such as using u.FL and MMCX connectors as terminations with cable specifications tailored to the requirement.

With more than 20 years of experience as a provider for RF connector and cable design solutions, this certainly served as one of our fundamental core competencies that brought us to where we are today as a total, integrated solution partner trusted by our customers. In addition to the solutions listed above, please also kindly contact our team for specific or further inquiries regarding standard or customized solutions

Disclaimer

While Simula has made acceptable level of effort into making sure the content and information compiled in this catalogue is precise, it does not assure that it is error-free. The dimensions and specifications in this catalogue are for reference only and may subject to change without notice. Please consult for latest specifications.

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