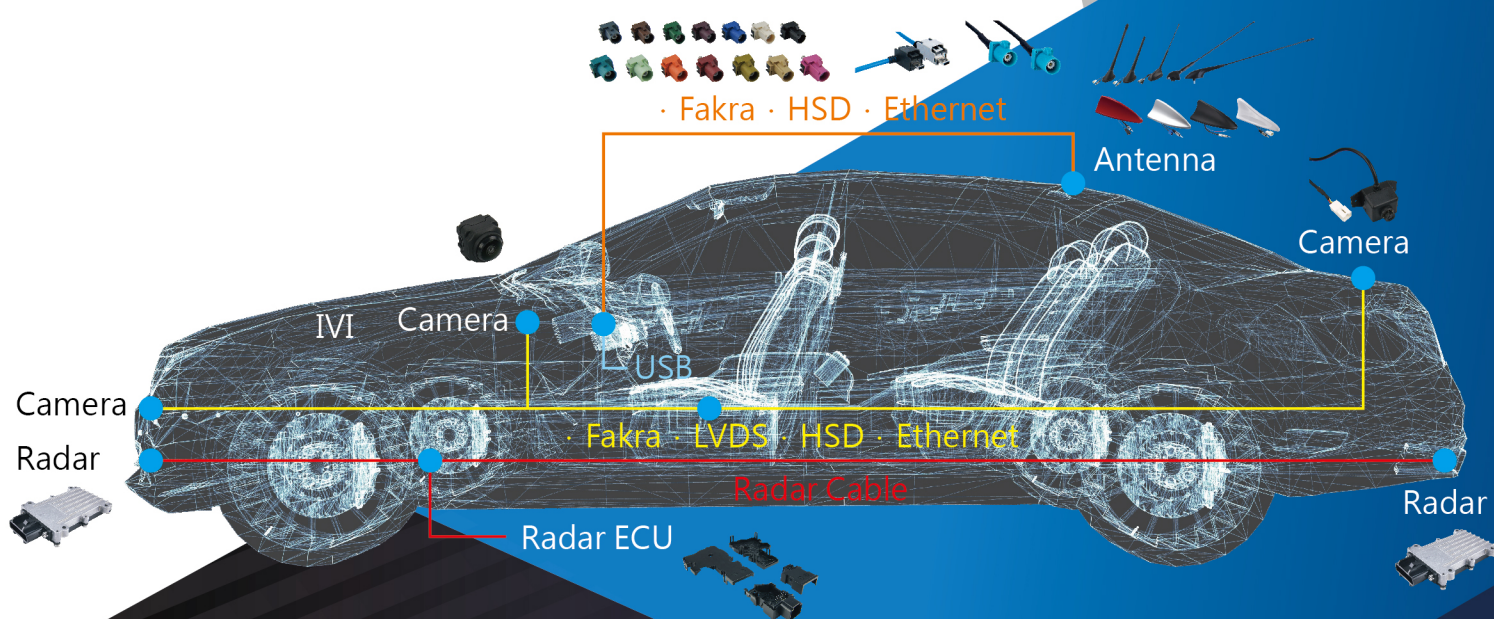


# Automotive Cable/Connector Solution

## - General

We provide diversification of automotive wiring, harnesses, and connectors.

All the harnesses, connectors and cables can be customized according to customer requirements. And we also develop standardized connectors for customers chosen.



## High Speed Data Transmission Cable

- HSD + Twist-Pair / Fakra + Coaxial
- HSD a 4-pin high-speed data transmission based on the connector and cable specification. Our solution provides HSD-to-Others cable.
- FAKRA is a connector for RF signal, with 13 kinds of colors and combinations. With coaxial cable it can provides long-distance transmission. Our solution provides various styles of FAKRA + Coaxial cable products.



# Multimedia Data Transmission Cable

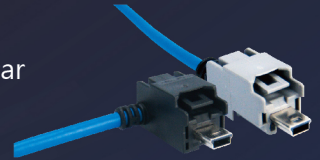
## - USB

- For digital data transmission, it's most popular way in vehicle.
- For different media systems to transmit digital data.
- For mobile devices to upload digital data
- For mobile devices charging



## - LVDS

- It's a low-voltage differential signal technology to transmit digital video signal , can reduce power consumption and reduce electromagnetic interference. Used in the car to transmit a variety of high-speed digital video signals
- For high speed digital data transmission use
- Suitable for LCD monitor and HD digital camera



## - HDMI

- HDMI is designed for transmit high definition video and audio data. It supports various video formats like SDTV, HDTV, and multi-channels digital audio formats. HDMI is able to provide up to 5Gbps data transmission.



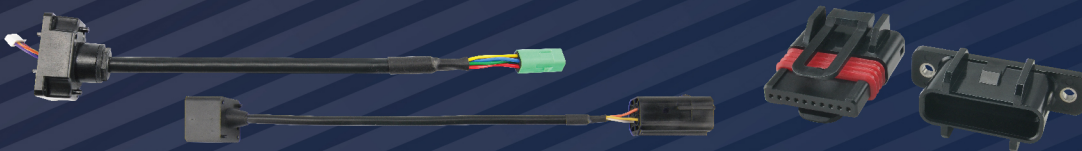
## - AUX

- Aux is audio input and output interface, widely used on multimedia system in vehicle.
- Generally there are single port Aux and Aux + USB integrated types cables.



## - Waterproof Cable

- A variety of camera, radar harness waterproof line design, can provide the best waterproof solution
- Meets general waterproof requirements and can reach IPX7 / IPX8 waterproof standard
- Meets high-end waterproof requirements, up to IPX9K waterproof standard



# Others Customized Cable/Connector

We are specialized in co-development of customized Connectors with our customers, which are able to fully compliant with customer's requirements.

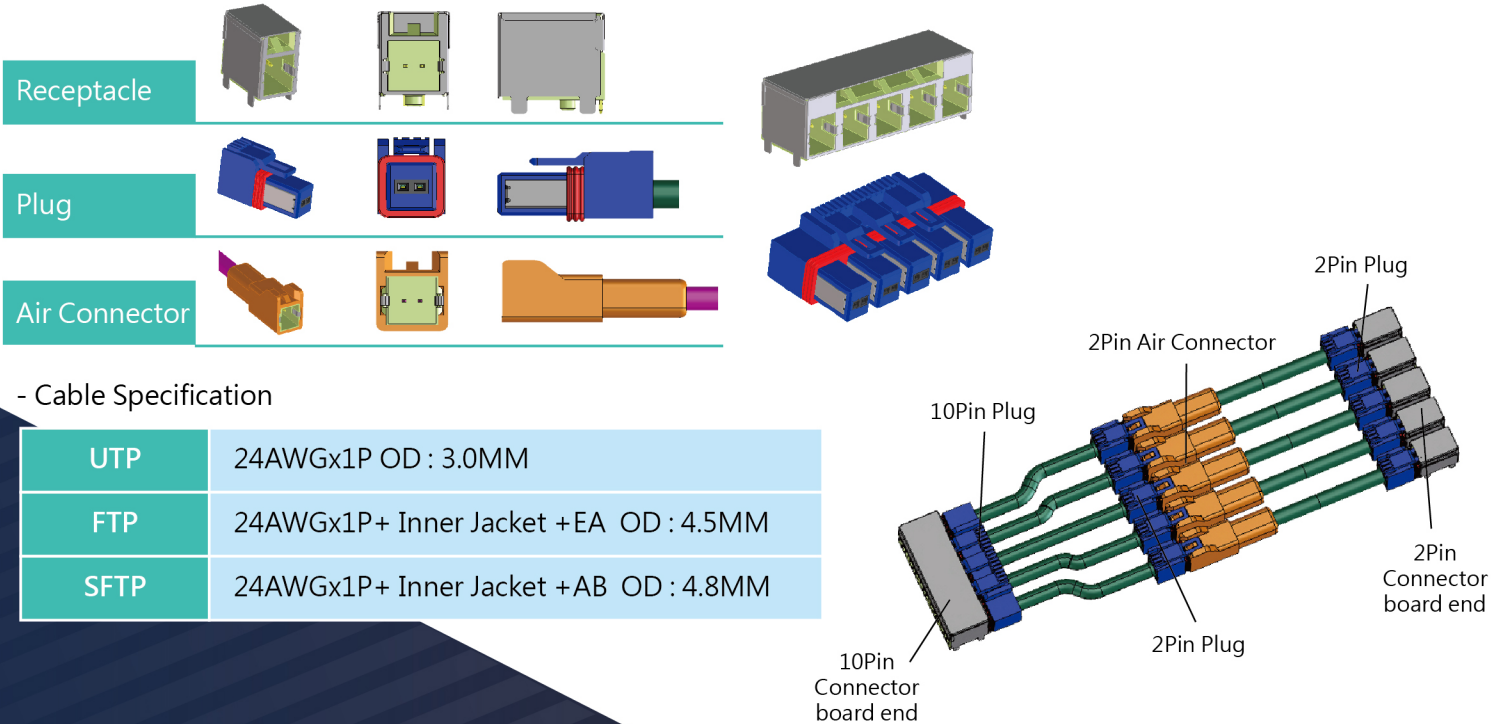
- USB Cable
- Radar Connector
- Radar Waterproof Harness
- Camera Header
- Electronic Control System Connector and Housing
- Lamp Holder and Waterproof Connector
- Gear Shifter Harness
- Antenna Feeder



# Automotive Ethernet Cable/Connector

With the progress of automotive technology, vehicle network will change into Ethernet, so we develop a series of Auto Ethernet Connector and Cable, for OE customers' need.

- Connector
  - Board end: 1 Port (2 Pin) 、 5 Port (10 Pin), shielded and un-shielded
  - Cable end: 1 Port (2 Pin) 、 5 Port (10 Pin) , shielded and un-shielded
  - Cable end: Air Connector 2pin , shielded and un-shielded



## - Cable Specification

UTP	24AWGx1P OD : 3.0MM
FTP	24AWGx1P+ Inner Jacket +EA OD : 4.5MM
SFTP	24AWGx1P+ Inner Jacket +AB OD : 4.8MM

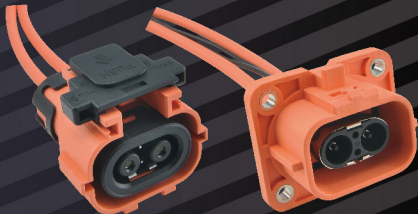
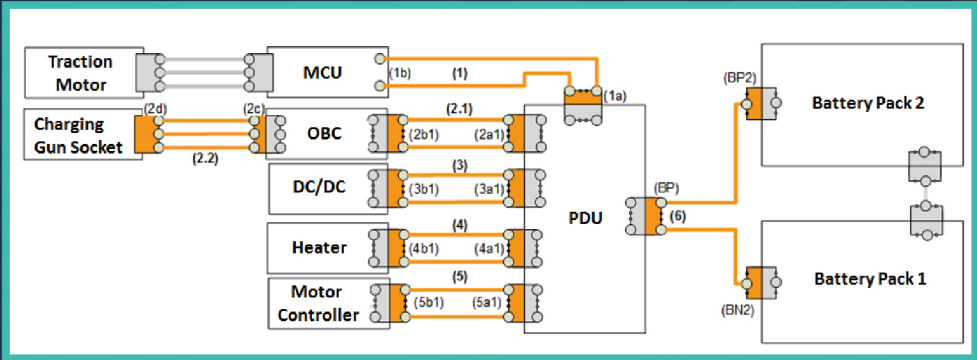
# HVIL – High Voltage Connector

- Feature

  - Slide-type interlock and slide-type release
  - intuitive without pressing
  - six kinds of foolproof design
  - Waterproof IP67
  - Protect finger touch, tool open safety design
  - Two-stage interlocking design
- Applications

  - On-board charger
  - Car charge
  - Battery pack
  - Electric heater
  - Electric air conditioning
  - DC/DC converter
- Specification

  - Terminal : 2.4mm
  - Wire range : 2.5mm²~5mm²
  - Voltage rating : DC 600V
  - Current rating : 25A
  - Temperature range : -40 ~ 105℃
  - Shielding : 360° from wire to device
  - Guideline : USCAR-2 · USCAR 37



Electrical performance		Mechanical behavior				Material	
Rated Voltage	Rated Current	Mating/unMating Cycling	Sealing Protection	Electrical Protection	Bolt	Material	
600 V DC	25 A	>500	IP67 IP69K	IP2XB	M4	Thermoplastic	UL94V-0

# FAKRA Connector

Fakra is a standard connector with high performance  
and cost-effective, can use in : GSM 、 GPS 、 AM/FM...etc.

## - Feature

- Meets to USCAR and German FAKRA standards
- All standard key codes and colors are available
- Strengthen positioning design, avoid center offset



Cable End (Female)



Cable End (Male)



PCB End (Male)

							
Code	A	B	C	D	E	F	G
Color	Deep Black	Cream White	Signal Blue	Bordeaux Violet	Leaf Green	Brown	Blue Gray
Application	Radio with phantom supply	Radio without phantom supply	GPS telematics or navigation	GSM Cellular Phone	TV (UHF)	TV (VHF)	SDARS terrestrial
							
Code	H	I	K	L	M	N	Z
Color	Violet	Beige	Curry Yellow	Carmine Red	Pastel Orange	Pastel Green	Water Blue
Application	GPS telematics and navigation	Bluetooth Controlled Parking Heating	SDARS satellite	Not defined	Keyless entry Tire pressure monitoring	Not defined	Neutral

## - Specification

- Category : Line end male / female
- RF series : PA66
- Positioning : Straight
- Cable type : RG174
- rated voltage : DC 60V
- rated store flow : DC 1A
- Characteristic impedance : 50Ω
- Frequency : 4 GHz
- Withstand voltage : AC 500V
- Insert force :  $\leq 25\text{N}$
- Pull out force :  $\leq 25\text{N}$
- Working temperature : -40°C ~ 105°C