

# High-speed Communication Cable and Connector

Under development  
Scheduled to be installed in 2025

High-speed communication cable for vehicle communication (ISO19642 compliance)  
Standard connector for vehicle communication of Ethernet and image transmission (USCAR, etc.)

## Background or assignment

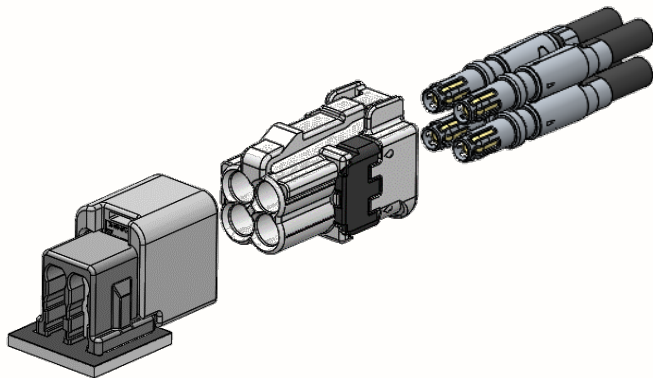
Acceleration of V2V, V2I, and V2X communication for emergency calls such as eCall in Europe and driving assistance  
→ Needs high reliability cables and connectors for wide frequency

## Solutions to Challenges

- 1 High frequency : Supports coaxial 9GHz broadband, differential 5GHz broadband
- 2 High reliability : Maintains margin considering vehicle environments and manufacturing variations
- 3 High productivity : Easy assembly structure designed by a wire harness manufacturer

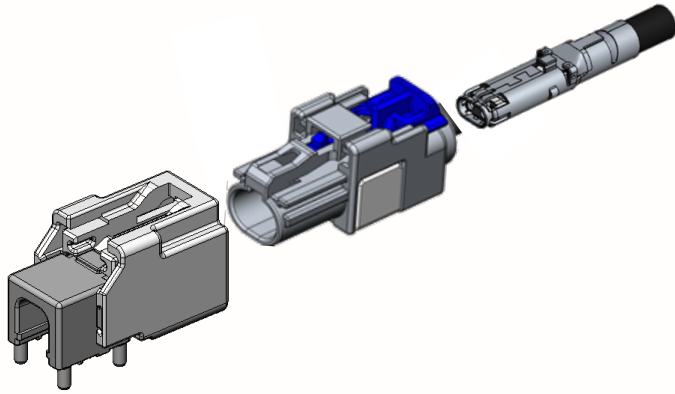
### Main performance, specifications and structure

#### Coaxial communication connector



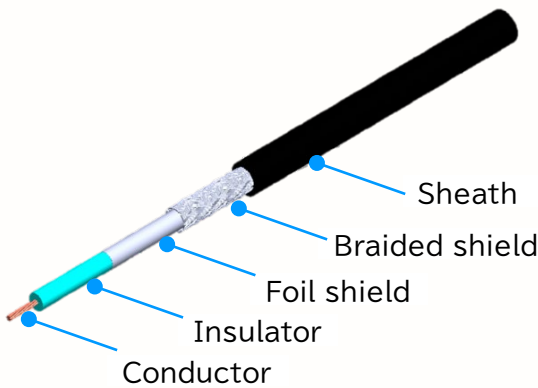
Characteristic impedance	50Ω
Connector standards	USCAR
Operating temperature range	-40°C to 105°C
PCB mounting	Through hole
Applicable wire	1.5DS-PBP

#### Differential communication connector



Characteristic impedance	100Ω
Connector standards	USCAR
Operating temperature range	-40°C to 105°C
PCB mounting	Through hole/SMT
Applicable wire	J-UTP/STP

#### Coaxial communication cable



#### Differential communication cable

[J-UTP]

[STP]

