

# UniCAN Accessories

for CSM data loggers



# CSM UniCAN Accessories

A wide range of accessories are available for CSM measurement modules and data loggers, such as the USB to CAN interface CSMcan, system and signal cables, plugs, sockets, mounting material, antennas, as well as memory cards.

This document provides an overview of accessories for CSM's UniCAN data loggers. Further accessory datasheets are available for ECAT measurement modules, CAN measurement modules and exhaust measurement technology.

UniCAN cables are designed to be used in combination with UniCAN data loggers, to connect a logger to power supply, to adapt CAN interfaces to standard plugs and for service purposes. They are robust, flexible, chemical-resistant and highly immune to interference. The antennas for UniCAN are specifically designed for operation with the optionally built-in modem or GPS receiver.

Do you have special wishes and requirements?  
Please do not hesitate to contact us.

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# Power Cables

## K212

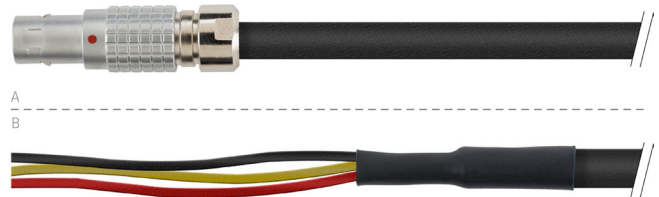
PC, L0B 7p, open

Power cable for UniCAN 3 data logger, with open cable end

### Connectors

**A** Plug LEMO 0B 7-pole code B  
**B** Open cable end

ART1440200	K212-0100	Length: 1 m
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# USB Cables

## MicroUSB Cable

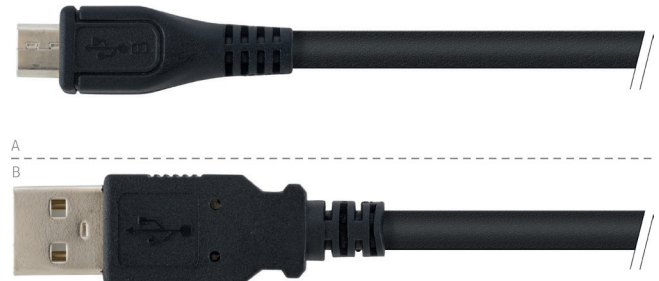
for UniCAN 3

MicroUSB-to-USB adapter cable for configuration and reading out data from a UniCAN 3 data logger using a USB-enabled PC

### Connectors

**A** MicroUSB  
**B** USB type A

ART1450300	MicroUSB-Cable 0200	Length: 2 m
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# Adapter Cables

## K213

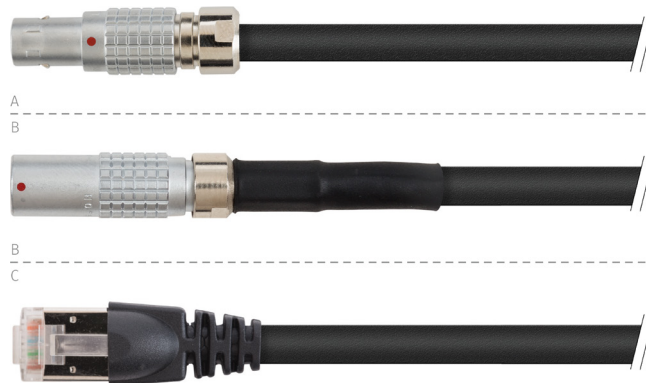
EC, L0B 7p, L0B 7p, RJ45 8p

Ethernet adapter cable for communication (e.g. data exchange with PC) for **UniCAN 3** data logger, cable length up to the RJ45 plug is 1.5 m (power supply via additional power cable necessary)

### Connectors

A	Plug	LEMO 0B 7-pole	code B
B	Socket	LEMO 0B 7-pole	code B
C	Plug	RJ45 8-pole	

ART1430300	K213-0025	Length: 0.25 m
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## K204

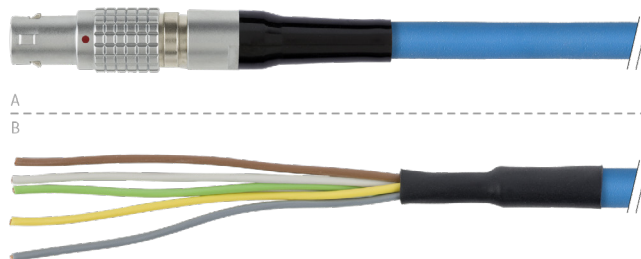
SC, L0B 7p, open

Signal cable for UniCAN 3 datalogger for connection to Dig I/O

### Connectors

A	Plug	LEMO 0B 7-pole	code A
B	Open cable end		

ART0650054	K204-0120	Length: 1.2 m
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## K220

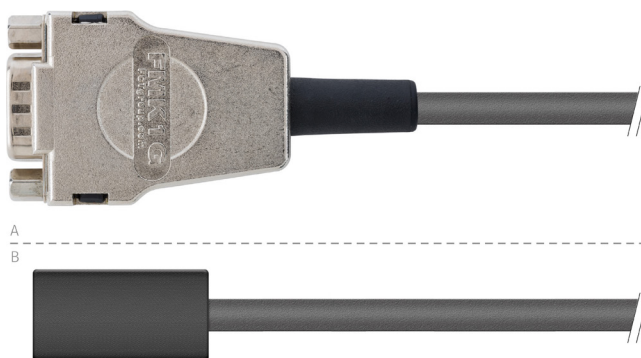
CC, DS 15p, RJ45 8p

Ethernet adapter cable for UniCAN 3 ETH interface. For connection of a RJ45 plug to the Ethernet connector of a UniCAN 3 ETH data logger

### Connectors

A	Socket	D-SUB 15-pole	
B	Socket	RJ45 8-pole	

ART1405000	K220-0025	Length: 0.25 m
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## OBD2 Adapter Cable

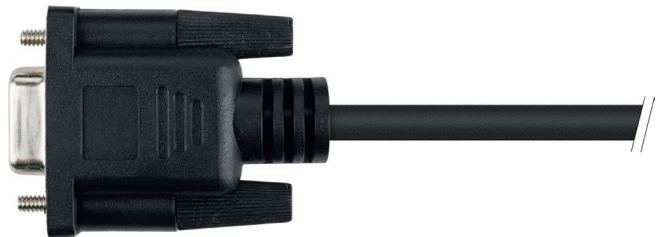
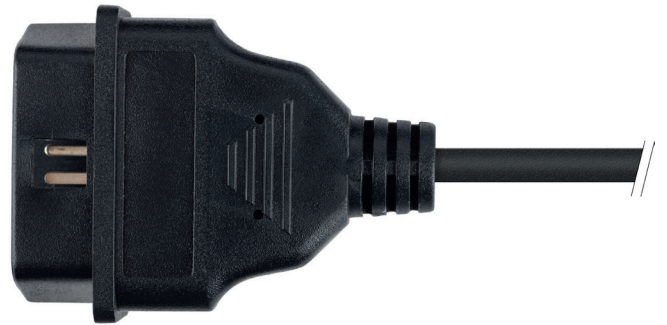
CARB, DS 9p

Adapter cable for connection of a UniCAN 3 data logger to the vehicles diagnostic socket via K201

### Connectors

<b>A</b>	Plug	CARB	
<b>B</b>	Socket	D-SUB	9-pole

ART5440100	OBD2 adapter cable	Length: 2 m
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## K201

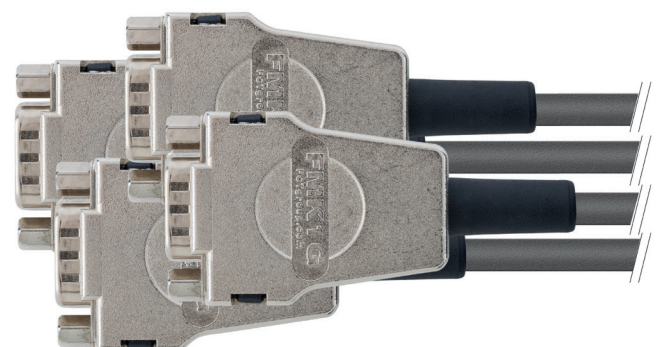
IC, DS 15p, DS 9p

Cable for UniCAN 3 data logger to split a CAN connector into 4 D-SUB9 connectors

### Connectors

<b>A</b>	Plug	D-SUB	15-pole
<b>B</b>	4 x Plug	D-SUB	9-pole

ART0650051	K201-0040	Length: 0.4 m
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# Antennas

## LTE Antenna

SMA

Self-adhesive patch antenna for UniCAN 3 datalogger for fast mounting on flat surfaces and glass

<b>Frequency</b>	617- 960MHz 1427 - 2690 MHz
<b>Connection</b>	SMA plug
<b>Dimensions (B × W ×D)</b>	116 × 22 × 6.7 mm
<b>Operating temperature range</b>	-40 °C to +85 °C

ART6900100

Length: 3 m



## WLAN Antenna

RP-SMA

WLAN antenna for UniCAN 3 data logger with adhesive pad for fast mounting on flat surfaces and glass

<b>Frequency</b>	2410 - 2490 MHz 4920 - 5925 MHz 5925 - 7125 MHz
<b>Connection</b>	RP-SMA plug
<b>Dimensions ((B × W ×D)</b>	83 × 35 × 13.3 mm
<b>Operating temperature range</b>	-40 °C bis +85 °C

ART6900200

Length: 3 m





## LTE/GPS Antenna

SMA, SMA

LTE/GPS combiantenna for UniCAN 3 data logger with adhesive pad for fast mounting on flat surfaces and glass

	LTE	GPS/GLONASS
<b>Frequency</b>	698 - 960 MHz 1710 - 2170 MHz 2500 - 2700 MHz	1575 MHz 1598 - 1606 MHz
<b>Connection</b>	SMA plug	SMA plug
<b>Dimensions (B × W × D)</b>	83 × 35 × 13.3 mm	
<b>Operating temperature range</b>	-40 °C to +85 °C	
ART6900000	Length: 3 m	



## LTE/GPS/WLAN Antenna

SMA, SMA, RP-SMA

Robust IP 69K combiantenna for UniCAN 3 data logger with adhesive pad, magnetic or pole mounting

	LTE	GPS/ GLONASS	WLAN
<b>Frequency</b>	617 - 6000 MHz	1575.42 - 1602 MHz	2.4 - 2.5 GHz & 5-7.2 GHz
<b>Connection</b>	SMA plug	SMA plug	RP-SMA plug
<b>Dimensions (Ø × H)</b>	99.3 × 36.1 mm (excl. bracket)		
<b>Operating temperature range</b>	-40 °C to +80 °C		
ART7000000	Length: 2 m		



## Hardware activations (optional)

### WLAN

Enables remote access (service access among other things for configuration changes and firmware Updates) and in combination with the option "Data Upload" a transfer of measurement data to a FTP(S) or SFTP server via WLAN.

### GPS

Allows recording of GPS data in addition to the measurement data. Thus the route profile can be determined and possible environmental influences can be better understood.

### Wake on CAN

The logger can be woken up from standby with the first incoming message on one or more selected CAN ports to start a measurement.

### CAN FD

With the option CAN FD (CAN with flexible data rate) all CAN interfaces can be extended by FD functionality. This makes it possible to achieve a significant increase in transmitted user data on the CAN bus compared to CAN standard. Furthermore, the transmission time of the data sent on the CAN bus can be reduced.

### WoC No Message Lost

This option extends Wake-on-CAN by the function to record already from the first incoming message. The device remains permanently ready to record. This means that no CAN message is lost.

## Software extensions (optional)

### CAN Stimulation

Lists of CAN messages can be defined, which are sent once or cyclically to a configurable CAN interface. This function can be used e.g. for activating/maintaining of sensors or other bus devices or for simulation of signals.

### Live data via MQTT

MQTT (Message Queing Telemetry Transport) can be used to display real-time information on the operating status of the logger and selected measurement channels remotely. The live data is transmitted via mobile communication or WLAN. This makes it easier to manage vehicle fleets, as errors or deviations can be detected quickly.

### CANsend

CAN messages can be formed from the channels of the measurement configuration, which are periodically transmitted on a configurable CAN interface (gateway function). CSMuniconf creates a signal database (DBC file), which can be used by other products (CAN-Display etc).



# Protocols (optional)

## CCP

CCP (CAN Calibration Protocol) enables communication with a large number of ECUs in the vehicle. This allows recording of specific measurement data of the ECU.

## XCP on CAN

XCP (Universal Measurement and Calibration Protocol) is an interface for read and write access to the memory of a control unit. The properties and memory addresses of this data are described in the A2L file format. With the XCP on CAN option, measurement data of the control unit can be acquired via CAN connection.

## XCP on Ethernet

With the XCP-on-Ethernet option, measurement data of the control unit can be acquired via Ethernet connection. This also allows an XCP-Gateway to be integrated in order to acquire the measurement channels of the CSM ECAT or CAN modules connected to it.

## Seed & Key

This option supports the use of Seed & Key. Control units can be provided with protection against reading out memory areas. A Seed & Key algorithm is used in order to be able to read out these areas in a secured manner.

## BlockRead CCP

Allows to read out specific memory blocks from CCP controllers as a whole.

## OBD2

The exhaust behavior of vehicles is monitored by the on-board diagnostics (OBD), which is required by law. This option provides the means to create a vehicle-specific signal source definition file and to record the channels on various services.

## J1939/1

SAE J1939 is the open standard for networking and communication in the commercial vehicle sector. Characteristic for J1939 is the use of CAN technology for networking and communication as well as cross-manufacturer interoperability. This option allows the recording of J1939 parameter groups (PGN), both peer-to-peer and broadcast messages. Suspect Parameters (SP) can be processed in a signal-oriented manner.

## AUTOSAR PDU

PDU (protocol data unit) is an abstraction layer between signals and messages, where several PDUs can be dynamically combined to one message. The AUTOSAR PDU option enables the data logger to detect the required PDUs on the bus and to read out their signals, regardless of the transport medium (CAN, CAN FD, Ethernet).

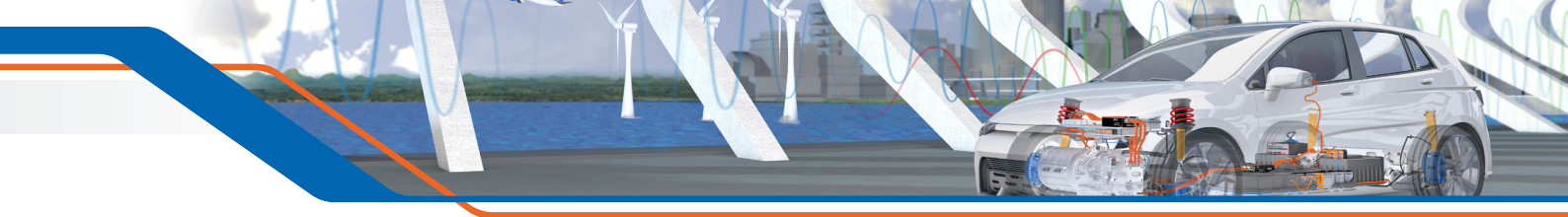
# Memory Cards

## CF DataCard

Robust CF memory cards in industrial grade quality for the operation of UniCAN data loggers with an operating temperature range of -40 °C to +85 °C

ART1160808	2 GB
ART1160809	16 GB
ART1160810	64 GB





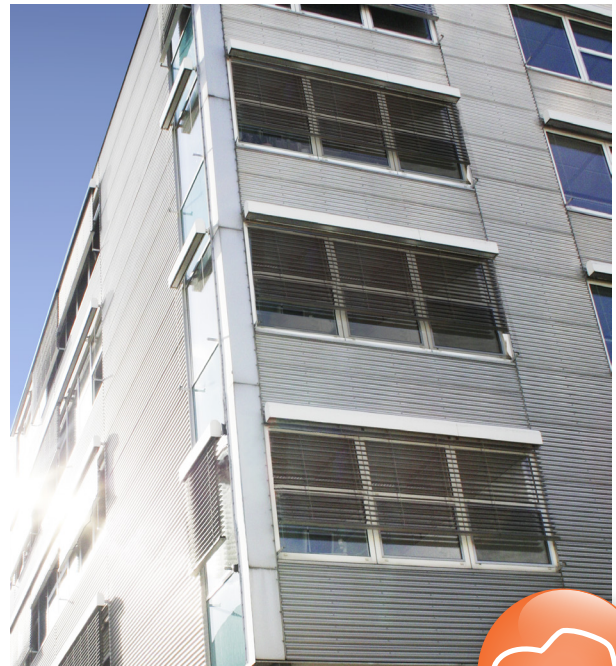
## About us

### CSM Computer-Systeme- Messtechnik GmbH

CSM is a leading, highly innovative manufacturer of distributed networked, robust measurement technology and data loggers for use on test benches and in vehicles. We have been setting technological standards in this field for more than 40 years. Our products are successfully used worldwide by almost all well-known manufacturers of passenger cars and commercial vehicles as well as their suppliers and service providers.

Permanent innovation and long-term satisfied customers are our guarantee for success. With our high-voltage safe measurement and breakout modules, developed for fast and synchronous measurements on electric and hybrid vehicles, we actively accompany our customers' transition to, or entry into electromobility.

Together with our partner Vector Informatik, we offer harmonized solutions for measurement data acquisition and analysis based on CSM measurement hardware and Vector's interfaces and software, such as the E-Mobility Measurement System: A scalable complete solution for analyzing, calibrating, testing, validating and also homologating electric and hybrid vehicles.



## Service & Support

Do you have special questions or technical requests of the use of the CSM measurement technology ?  
Our Service & Support is at your disposal.

Please contact us via our website:  
[www.csm.de/en/service-support](http://www.csm.de/en/service-support)





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