

## ARCOS 2

### Scalable data logger for fleet testing and experimental validation

- 2 x SFP+ 10 GbE
- 8 x 1 GbE
- Flexible scaling CAN, LIN, FlexRay, ETH inputs
- 4G modem, WiFi and GPS receiver optionally equipable
- Multiple video channels for USB and IP cameras
- Wake on CAN, LIN, FlexRay (WoC, WoL, WoFR)
- Quickstart, No Message Lost (NML), Wake on CAN (WoC)
- Designed for applications in harsh environments
- Support for IPEmotionRT and dataLog



Interfaces	
CAN HS (ISO 11898-2)	Yes
CAN FD	Yes
LIN (1.3 & 2.0)	Yes
ETH (100 Mbit)	Yes
ETH (1 GbE)	Yes
SFP+ (10 GbE)	Yes
FlexRay	Yes
Analog input	No
Digital I/O	No
Audio input / output	CAN-Microphone USB-Microphone iMICusb
Ethernet interface to PC	Ethernet (1Gbit) 2 x Ethernet (1Gbit)
USB 2.0 ports	2
USB 3.0 ports	3 x USB (3.1)
Lemo, 9-pin for M-CAN modules	Via PM module
Driver display system	openABK (dataLog) DRIVEview (IPEmotion RT) IPEmotion ME
Interface option 1	Modular 2 ... n CAN FD
Interface option 2	Modular 2 ... n LIN
Interface option 3	Modular 1 ... n ETH
Interface option 4	Modular 1 ... n FlexRay

Extender boxes	FlexRay, LIN, CAN FD Satellite Interface CLFD Box, AnalogBox 32, ThermoBox 32, ThermoBox 128
<b>Device</b>	
Operating system	Linux (64 bit)
Processor	Intel i7-9850HL
RAM memory	32 GB
Inputs	8 x Ethernet (1 Gbit), 2 x SFP+ (10 Gbit), 1 x ABK socket (1 Gbit), 2 x feature socket (1 Gbit)
Performance Index	9112
Data Transmission	Modular: WiFi, Modem, GNSS
Data logger software	dataLog IPEmotion RT
Storage medium	m2.SATA
Storage capacity	Interner Speicher: 256/480/960 GB; extern ARCOS DXB: 2 x 960 GB
Voltage supply	Boot: 7,5 V ... 54 VDC, Operation: 6,5 V ... 54 VDC
Supply voltage thresholds	On 7.5 VDC ( $\pm 0.3$ ) / Off 7.5 VDC ( $\pm 0.3$ )
Power consumption, typical	75 W
Working temperature range	-40 ... 80 °C (-40 ... 176 °F)
Storage temperature range	-40 ... 80 °C (-40 ... 176 °F)
IP-Code	IP 40 (ISO 20653 - 2013)
Relative humidity	5 ... 95 %
Dimensions	B184 mm x H80 mm x T170 mm (7.24 in x 3.15 in x 6.69 in)
Weight	3200 g (7.05 lb)
<b>Protocols and traffic</b>	
CCP / XCP on CAN	Yes
J1939	Yes (IPEmotionRT)
OBD	Yes
WWH-OBD	Yes (IPEmotionRT)
KWP on CAN	Yes
UDS / ODX / PDX	Yes
XCP on ETH	Yes
FlexRay / XCP on FlexRay	Yes
openABK	Yes (dataLog)
SOME IP	Yes

FlexRay-Traffic	Yes
CAN-Traffic	Yes
LIN-Traffic	Yes
ETH-Traffic	Yes
CAN-send	Yes
<b>Software functions</b>	
Configuration software	IPEmotion IPEmotion RT.UI
No Message Lost (NML)	Yes
Wake on CAN (WoC)	Yes
Wake on LIN (WoL)	Yes
Wake on FlexRay (WoFR)	Yes
On board scripting	Yes
On board math & logic operations	Yes
File formats for data storage	ZIPRT, BLF, AVI, WAV, MDF4.0, MDF4.1, ASC, ATFX, PCAP (depending on operating system)
<b>Wireless communication</b>	
GNSS (Global Navigation Satellite System)	GPS+BeiDou / GPS / GLONASS / BeiDou / Galileo
WiFi	2.4 GHz / 5 GHz (WiFi 802.11 a/b/g/n/ac)
Modem	4G (LTE) 3G (UMTS)
Bluetooth	Bluetooth 5.3 Bluetooth LE
IPEcloud / FTP-Server	Yes
<b>Video</b>	
IP-camera (Real Time Streaming Protocol)	AXIS, BASLER, LINKSYS, etc... / MJPEG stream
USB Video Class (UVC)	All cameras with MJPEG format
<b>Accessories</b>	
System cable	112361 102537 100658
Input cable	114446 ABK - ETH cable 666-531.xxx Feature / ABK cable satellite 101390 USB-Lemo cable
Antenna	113734 114630