

FMS interface

Technical specifications

Physical characteristics	
Dimensions	Length 80mm, Width 40mm, Height 20mm
Weight	100grams
Material	Flame retarder ABS
Environmental sealing	IP67
Drop specification	1.5m
Storage temperature	-40 to 90°C
Operating temperature	-40 to 85°C
Relative humidity	max 90% at 40°C
MTBF	32002h

Electrical characteristics	
Supply power	8 to 40 Volt DC
Electrical isolated	500Volts
Power consumption	Active: 0.5Watt typ, 1.0 Watt Max Power on 200ms 10W
CAN High, CAN Low	Nominal input range: 0-5V Common mode input range: 7-12V Failsafe input range: 40V

CANbus characteristics	
Baudrate	Selectable 10 – 1000kBit/sec
Protocols	Selectable: J1939/Layer2
Hardware protocol	CAN V 2.0a, CAN V 2.0b
Default Device address	228

CANbus characteristics	
Protocols	Selectable: J1939, FMS, FMS Bus, proprietary
Autovehicle supported	DAF LF, CF, XF ERF ECX IVECO Eurocargo, Stralis MAN TGL, TGA, TGX MERCEDES Actros, Axor RENAULT Magnum, Premium SCANIA 4,P, R VOLVO FH, FL, FM PETERBILT KENWORTH STERLING WESTERN STAR TRUCKS FREIGHTLINER INTERNATIONAL TRUCKS VOLVO DAIMLER BUSES - EvoBus NEOMAN SCANIA VOLVO BUS CORPORATION IrisBus IVECO

K-Line characteristics	
Protocols	Selectable: DACIA proprietary
Autovehicle supported	Logan, Sandero, Duster

J-Bus characteristics	
Protocols	J1708/J1587
Autovehicle supported	VOLVO FH, FL, FM PETERBILT KENWORTH STERLING WESTERN STAR TRUCKS FREIGHTLINER INTERNATIONAL TRUCKS VOLVO Equipments powered by: CUMMINS engine Detroit Diesel engine DEUTZ engine CATERPILLAR

CANGO interface is the only one telematic solution which can give you CANbus, J-Bus or OBDII (K-Line) connectivity.



RS232 characteristics	
Baud rate	Selectable: 1200 to 115200 bps, default 56000 bps
Protocols	ASCII based protocols
Hardware control	NONE
RS232 decoding	Datalength 8, Stopbit None, Parity None
Checksum support	Selectable: Proprietary

Device connector types	
K-Line connector	4pins mini size female
RS232 connector	3pins mini size female
CANbus connector	2pins mini size female
Power connector	2pins mini size female

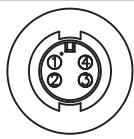
Conformity	
72/245/EEC	The automotive directive for electronic equipment which can build in road vehicles
ISO 11452-2 1995	Radiated immunity, 200MHz ... 1000MHz, 1kHz, 80% modulation, 30V/m
ISO 11452-4 1995	Bulk current injection 20 ... 200MHz, 1kHz, 80% modulation, 60mA, rms
ISO 11898	CAN for high-speed communication
SAE J1939	Recommended practice for serial control and communications vehicle network
SAE J1708	Serial Data Communications Between Microcomputer Systems in Heavy-Duty Vehicle Applications
SAE J1587	Electronic Data Interchange Between Microcomputer Systems in Heavy-Duty Vehicle Applications
ISO 9141	Road vehicles – Diagnostics systems. Requirements for interchange of digital information
SAE J2178-1	Class B Data Communication Network Messages— Detailed Header Formats and Physical Address Assignments
SAE J2012	Diagnostic Trouble Code Definitions
ISO 7637	Electrical disturbance by conduction and coupling
CISPR 25 chapter 13	Emission measurement, Horizontal&Vertical, 30MHz..1GHz



K-Line connector

PIN	FUNCTION	COLOUR
pin3	K-Line	GREEN
pin4	L-Line	WHITE
pin2	12VDC car power	RED

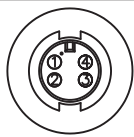
option



J-Bus connector

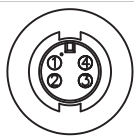
PIN	FUNCTION	COLOUR
pin3	J1708 +	GREEN
pin4	J1708 -	WHITE

option

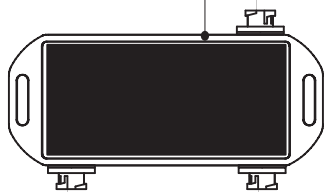


CANbus_1 connector




PIN	FUNCTION	COLOUR
pin4	CAN High	WHITE
pin3	CAN Low	GREEN



LED



LED status

-  Interface active
-  Interface is in configuration mode
-  Operational conflict:
 - No acknowledgement of CANdata (check CANbus, Check CANbus termination)
 - In correct CANbus speed (check speed)

Order codes

22646-4-X01	CANGO interface with CANbus connector
22646-4-X02	CANGO interface with J-Bus connector
22646-4-X03	CANGO interface with K-Line connector

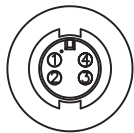
PIN	FUNCTION	COLOUR
pin2	Rx	BLUE
pin1	Tx	BROWN
pin3	Ground	BLACK

RS232 connector



PIN	FUNCTION	COLOUR
pin4	CAN High	WHITE
pin3	CAN Low	GREEN
pin2	8 ~ 40VDC	RED
pin1	GND	BROWN

CANbus_2 & Power connector



Usage of this device is permitted for industrial purposes only and can not be just in situations in which human lives depend upon the operation of the device.

