



## AnaGate CAN FX2

Ethernet / CAN FD Gateway

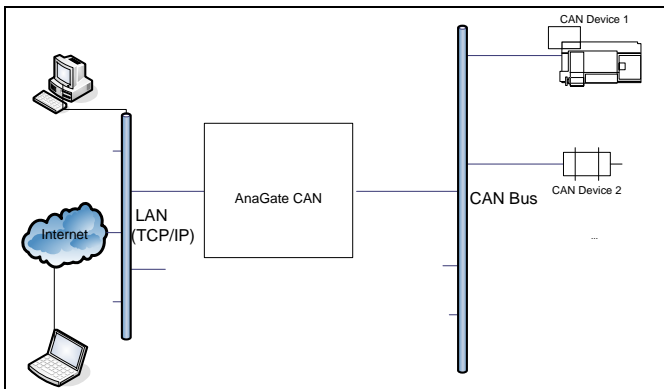
### Product overview

The AnaGate CAN FX2 gateway connects a PC, an embedded PC or other general device to up to 2 CAN buses via the TCP/IP network protocol (Ethernet). The AnaGate CAN FX2 works as a device with no own CAN identifier on the bus.

The CAN messages are transparently embedded in TCP/IP telegrams to enable communication with any CAN device on the CAN network. This means that a CAN network can be addressed over the Internet or from multiple different PC's over a network. Higher protocol layers e.g. CANopen, Devicenet or J1939 can be used by the host system too.

### Gateway mode

In the gateway mode the CAN messages are transferred transparently over TCP/IP between the CAN network and the host platform (e.g. PC) in both directions.



### Listen mode

In the listen mode messages can be recorded without influencing the CAN bus.

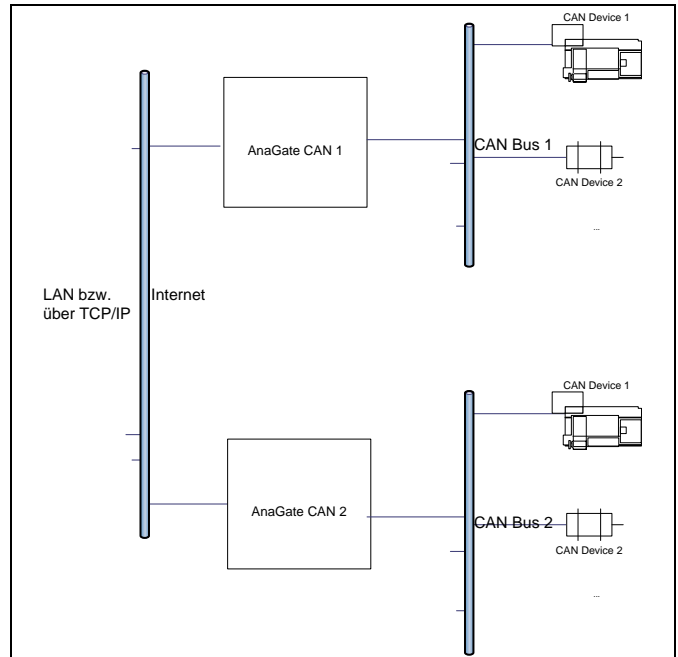
### Bridge mode

In the bridge mode two arbitrary CAN networks are bridged together internally.

### LAN Bridge mode

In the LAN bridge mode each CAN interface can be interconnected to an arbitrary CAN network by an

additional AnaGate CAN model.



### Software interface

The application protocol is based on the TCP/IP protocol and is described in detail in the documentation.

Thus the access to the AnaGate CAN FX2 device can be programmed via native calls to the TCP/IP socket interface. This means that any communication partner with a LAN (TCP/IP) interface is able to communicate with the AnaGate CAN FX2.

Accessing the device with the supplied windows application library (DLL) is much more comfortable and can be used with a conventional programming language.

### Technical specifications

Measurements:	L x W x H	125 mm x 128 mm x 50 mm
	Weight	approx. 250g
Power supply	Input voltage	9 ..28 V DC
	Power consumption	about 5W (without USB or I/O devices)
Temperature	Operating/Storage	-20 .. +70°C / -40 .. +85°C
System	Processor	Dual ARM Cortex A9 (1GHz), 512MB RAM, 4GB eMMC Flash
	Operating system	Linux kernel 4.15
CAN Bus 2.0B und FD	Nominal Baudrate	20 kbps .. 1 Mbps
	Data Bit Rate	500 kbps .. 8 Mbps
	Conformity	ISO 11898-1:2015 und non-ISO CAN FD (Bosch)
	CAN Controller	2x MCP2518FD
	CAN Interface	2x ISO 11898-1:2015, galvanically decoupled (1,5 kVrms)
	Interface	2x 4-pole plug incl. CAN_H, CAN_L (Pitch 3.81)
Modes of operation	Gateway mode	Multiple host controllers can receive/transmit CAN messages.
	Listen mode	Recording of CAN message without CAN bus influences..
	Bridge mode	2 CAN networks are connected internally.
	LAN Bridge mode	Both CAN interfaces can be interconnected to an arbitrary CAN network via LAN or internet.
LAN interface:	Baud rate	10/100/1000 Mbps
	TCP/IP	Static or dynamic IP address (DHCP), configurable via web interface.
	Interface	RJ45 plug
Analogue IO:	Inputs	4 (0-24V , R <sub>i</sub> ~ 500kΩ)
	Outputs	4 (0,5V-min(24,5V, V <sub>input</sub> )), I <sub>max</sub> =250mA, short-circuit-safe
EC directives:		CE, RoHS.
Software:	Configuration	Via HTTP interface.
	CAN Monitor	Windows program to access CAN bus via AnaGate CAN.
Programming:	Native	Via socket interface using a documented application protocol.
	Windows (PC)	Via application library (32/64-bit DLL) using a standard programming language (e.g. C/C++, Delphi).
	Linux (PC)	Via static library ( g++ V4.6, 32/64bit) or socketCAN.
	CANopen	OpenSource driver for CANFestival.
	Embedded Linux	Support (e.g. ARM9, Raspberry Pi) is available upon request.
	Simatic S7	Support is available upon request.

### Ordering information

Order number	Scope of delivery
GT-CAN-FX2	AnaGate CAN FX2 including CD-ROM with documentation, software API as a DLL for Windows 7/8/10 (32/64bit)
GT-SCOUT	CANscout - Professional Windows® software communicating with CAN- and CAN-FD networks via AnaGate CAN hardware series (CD,Windows)