AnaGate CAN FX8

Ethernet / CAN FD Gateway

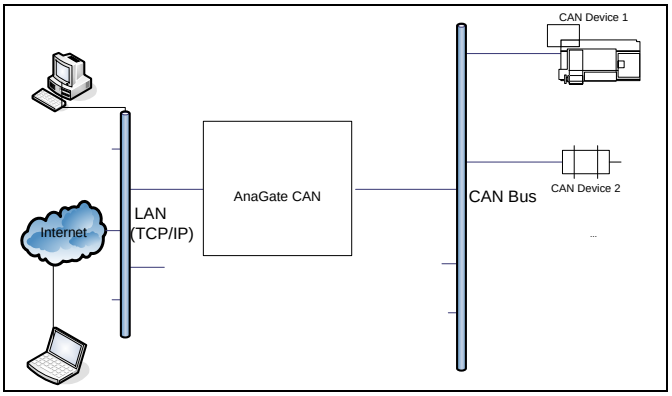
Product overview

The AnaGate CAN FX8 gateway connects a PC, a embedded PC or other general device to up 8 CAN busses via the TCP/IP network protocol (Ethernet). The AnaGate CAN FX8 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

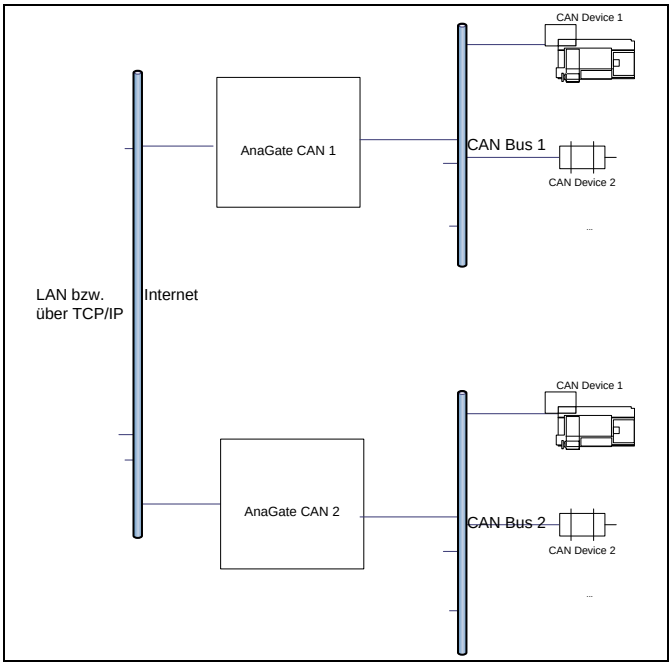
In the listen mode messages can be recorded without influencing the CAN bus.

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 detailed in the documentation.

Thus the access to the AnaGate CAN FX8 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 FX8.

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

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Technical specifications

Measurements:	L x W x H	200 mm x 128 mm x 50 mm
	Weight	approx. 380 g
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 Data Bit Rate Conformity	20 kbps .. 1 Mbps 500 kbps .. 8 Mbps ISO11898-1:2015 und non-ISO CAN FD (Bosch)
	CAN Controller	8x MCP2518FD
	CAN Interface	8x ISO 11898-1:2015, galvanically decoupled (1,5 kVrms)
	Interface	8x 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_I ~ 500kΩ)
	Outputs	4 (0,5V-min(24,5V, V_{Input})), I_{max}=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-FX8	AnaGate CAN FX8 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)

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