



AnaGate CAN X2 Ethernet / CAN Gateway

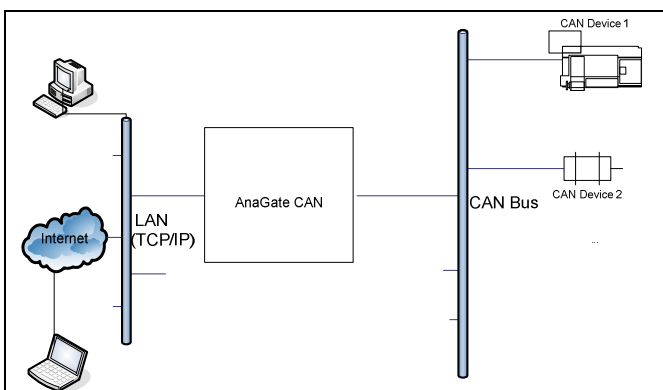
Product overview

The AnaGate CAN X2 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 X2 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.

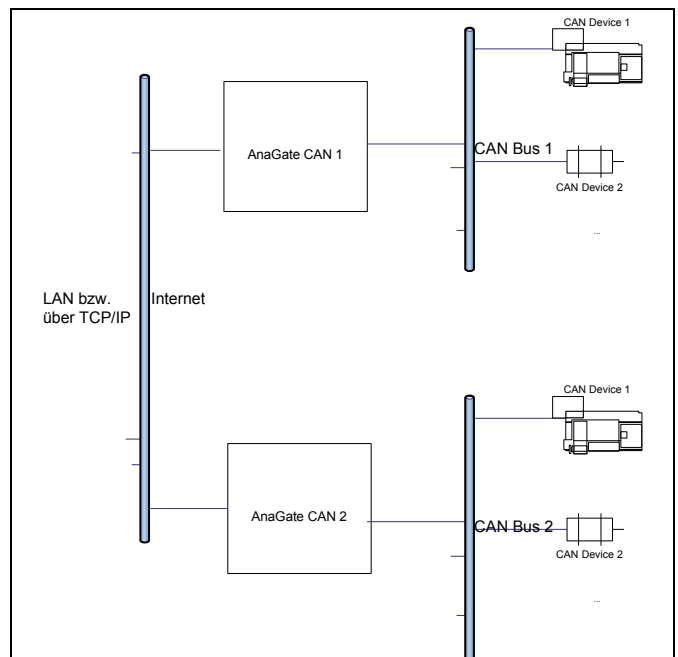
Bridge mode

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 X2 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 X2.

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. 272 g
Power supply	Input voltage	9 ..28 V DC
Temperature	Operating/Storage	-20 .. +70°C / -40 .. +85°C
System	Processor	ARM9 (32bit ,400MHz), 64Mb RAM DDR2, 256Mb NAND Flash
	Operating system	Linux kernel 3.9
CAN bus:	Baud rate	50, 100, 125, 250, 500, 800 kbps or 1 Mbps configurable with software or web interface
	CAN controller	2x FPGA (similar to SJA1000)
	CAN interface	2x ISO 11898-2, galvanically decoupled
	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 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-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) is available upon request.
	Simatic S7	Support is available upon request.

Ordering information

Order number	Scope of delivery
GT-CAN-X2	AnaGate CAN X2 including CD-ROM with documentation, software API as a DLL for Windows 7/8 (32/64bit)