CAN Physical Layer Analyser CANwatch

Special Features

- Fast recognition of installation errors
- Preventive diagnosis allows increase of system availability
- Scanning of the analog signal and evaluation of the signal quality
- Suitable for system integrators and plant operators

Description

CANwatch is an analyzer supporting easy error detection during installation and operation of CAN networks. CANwatch judges the analog signal on the bus and detects errors like e.g. invalid levels, overshoots, slow slopes and short circuits within the signal lines.

Besides the diagnosis of problems during installation CANwatch offers the possibility to detect signal deficiencies below the level causing failures. This allows preventive error detection and thus an increase regarding the availability of automated systems.

Errors on the physical level of the CAN bus cannot be detected by protocol analyzers and could until now only be analyzed by specialists with expensive and bulky hardware. Due to the easy diagnosis and display with LEDs CANwatch offers fast detection and correction of errors also to installers and plant operators.

Technical Data

Layout and Connection

The bus interface is realized with D-Sub9 connectors complying to the CiA standard DS-102.

Pin	Name	Function
1	-	Reserved, do not connect
2	CAN_L	CAN data line (dominant low)
3	GND	Ground
4	-	Reserved, do not connect
5	-	Reserved, do not connect
6	GND	Optional ground
7	CAN_H	CAN data line (dominant high)
8	-	Reserved, do not connect
9	Vcc	Supply voltage

Limiting Values

Parameter	Minimal	Maximal	Unit
Storage temperature	-20	+80	°C
Operating temperature	0	+60	°C
Supply voltage	-100	+35	V
Voltage on bus connections	-2	+7	V
Admissable power consumption (at 60 °C)	-	2000	mW

Any (also temporary) stress in excess of the limiting values may cause permanent damage on CANwatch and other connected devices. Exposure to limiting conditions for extended periods may affect the reliability and shorten the life cycle of the device.

Nominal Values

Parameter	Minimal	Typical	Maximal	Unit
Supply voltage	10	24	30	V
Current consumption	-	40	-	mA

All values, unless otherwise specified, refer to a supply voltage of 24 V and an environmental temperature of 20°C.

Scope of Delivery

- CAN physical layer analyser CANwatch
- User manual