

## MKT-View III

### The multifunctional mobile visualization unit for CAN-networks



### Features

- Sunlight readable 4,3" Color display with 65356 colors and touch screen
- Function-keys backlighted by RGB-LEDs
- Voice in-/output
- Automatic brightness control of the display
- Wide range power-supply 6 ... 36 V DC and standby mode
- Mini-UPS for the defined saving of data
- Interfaces 2 x CAN / 1 x RS232 / 1 x GPS-receiver module / 1x Ethernet
- Two digital inputs
- Real-time clock
- SD-card slot
- Visualization and logging off CAN-bus-signals / visualization of CAN raw data
- Sending of CANdB data
- Script language

## 1. Pin assignment

### X1 Lemo/ODU-female connector 14-pin

Pin 1: CAN1_HIGH	Pin 8: RS232_TxD
Pin 2: CAN1_LOW	Pin 9: RS232_RxD
Pin 3: CAN2_GND	Pin 10: DIGITAL_IN1
Pin 4: CAN2_HIGH	Pin 11: DIGITAL_IN2
Pin 5: CAN2_LOW	Pin 12: ANALOG_IN 1
Pin 6: U <sub>B</sub>	Pin 13: ANALOG_IN 2
Pin 7: GND	Pin 14: ANALOG_GND

### X2 Ethernet

### X3 GPS-receiver

PIN 1:	not connected
PIN 2:	TxD
PIN 3:	RxD
PIN 4:	U <sub>ON</sub> (power supply)
PIN 5:	U <sub>BAT</sub> (continuous supply for standby operation)
PIN 6:	GND

### X4 Relais Output

### X5 SD-Connector Push-Push

### X6 Jack plug 3,5 mm for an external microphone

Input for a mono-microphone with 3,5 mm stereo jack plug.  
Automatically switching between external and internal micro.

## 2. Mechanical data

### 2.1 Enclosure

2.1.1 Material	Aluminum
2.1.2 Size	(170 x 85 x 35) mm
2.1.3 Weight	350 g
2.1.4 Protection class	IP20
2.1.5 Color	black

## 3. Display / keyboard

### 3.1 Display

3.1.1 Resolution	480 x 270 pixel / 4,3"-TFT with 65356 colors
3.1.2 Touch screen	resistive
3.1.3 Contrast	temperature compensated, contrast ratio 400:1 (nom)
3.1.4 Brightness	max. 350 cd/m <sup>2</sup> , automatically controlled

### 3.2 Membrane keys

3.2.1 Keys	3 keys with snap domes, material of front membrane polyester
3.2.2 Backlight	3 x RGB-LEDs; single controlled
3.2.3 Encoder	16 detents per turn, integrated push button
3.2.4 Life time keys /encoder	1.000.000 switching cycles

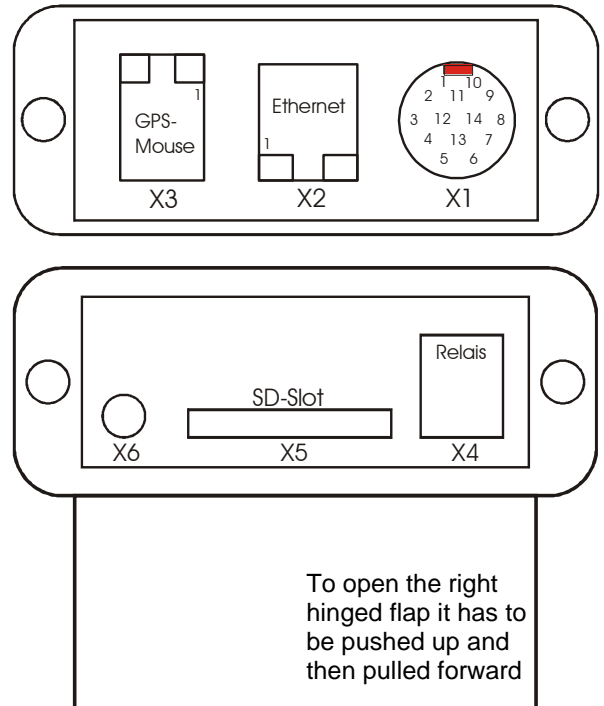


Figure 1: Connectors

### Wiring recommendations:

To ensure an EMC-compatible operation, shield has to be connected to chassis ground

Serial interface-signals RxD and TxD are described from the MKT-View III

The Enclosure of X1,X2 and X3 is electroconductive with the terminal body.

## 4. Electronic

### 4.1 Temperature

4.1.1 Operating	-20 ... +60 °C
4.1.2 Storage	-30 ... +70 °C

### 4.2 Power Supply

4.2.1 Input supply $U_B$ :	6 V DC $\leq U_B \leq$ 36 V DC
4.2.2 Current consumption:	200 mA (nom) at $U_B =$ 12V DC
4.2.3 Standby current:	3,0 mA (nom)

### 4.3 Microcontroller / memory

4.3.1 $\mu$ P	Cortex-M3 / LPC1788 / 96 MHz
4.3.2 FLASH-EEPROM	4 MByte
4.3.3 SDRAM	32 MByte
4.3.4 EEPROM	32 KByte

### 4.4 Interfaces

4.4.1 CAN-interface	2x High speed CAN transceiver up to 1 Mbit/s 120 $\Omega$ -termination resistor, to be electronically hooked on (not possible in standby operation) CAN2 interface galvanically isolated
4.4.2 RS232-interface	1x
4.4.3 Ethernet	1x
Connector	RJ45
Transfer rate	100 MBit/s
Connecting Cable	Twisted Pair 2x2 oder 4x2, 100 $\Omega$ , CAT5, SF/FTP, SF/UTP or S/FTP
Wire cross section	AWG 26/7 up to AWG 22/1
Cable length	max. 100 m (only with a wire cross section of AWG 22/x)
4.4.4 SD-CARD	1x SD-Card FAT16, up to 2 GB
4.4.5 Interface for GPS-module	1x
Connector	RJ12
Current consumption	< 100 mA

#### Note:

The MKT GPS-Mouse with the order-no. 20380 can be used in combination with the MKT-View III without a need of an additional adapter

### 4.5 In-/outputs

4.5.1 Digital inputs	2x Input resistance: > 6 k $\Omega$ Input voltage range ‚low‘: 0 ... 3 V DC Input voltage range ‚high‘: 6,5 ... 36 V DC
4.5.2 Digital outputs	1x relay; potential free contact Contact load /output current: $\leq$ 1 A
4.5.3 Analog inputs	2x Voltage input: 0 ... 15 V DC Input resistance: >200 k $\Omega$ Resolution: 10 Bit

#### Note:

Optionally each voltage input can be assembled to function as a current input 0 ... 20 mA

