

## **MCD10 Mobile Colour Display**

## with touch screen technology

The robust 10" colour display MCD in a flat housing is an operating and monitoring unit for use in harsh environments. The surface is extremely scratch-proof and resistant to breakage. The anti-reflective glass ensures glare-free reading even in bad lighting conditions. The brightness is automatically readjusted by means of a sensor.

MCD10 is specially designed for installation in mobile machinery. For all applications, the touch-screen of the device can be easily custom-configured.

The user surface offers free design possibilities to display and to operate preferred instruments, individual menus and overviews.

The monitor can be used horizontally or vertically. Due to the vertical orientation of the display the machine environment is represented in a natural way.

The display is equipped for the connection of three colour cameras and features an acoustic signal transducer.

A USB interface is available for reading user data, back up the customized configuration and for loading updates.

Data exchange with control units and sensors is carried out via CAN bus - all CAN-based protocols are suitable. Also it is possible to communicate via Ethernet.





## Technical data:

Dimensions	Width x height x depth in cm: 19,9 x 25,2 x 2,7	
Housing	Colourless anodized aluminium protection category on the front IP67 and IP69 protection category on the back IP65 and IP67	
Weight	1,35kg	
Display	480 x 640 pixels with 262144 colours, 10.4-inch-diagonal, aspect ratio 4:3, Dimmable, sensor controlled LED-backlight Brightness: 500cd/m², Contrast: 1500:1 Viewing angle: vertical 176°, horizontal 176° Anti-reflective and hardened non-Flex-Tec glass, bonded	
Operation	By projected capacitive touchscreen	
Operating conditions	Normal, Standby, Idle	
Programming	C ++ by the manufacturer or user	
Power supply	Operating UB = 8 32V Data retention up to UB = 4,5V	
Connections	M12 8-pole for supply M12 4-pole, D-coded, Industrial Ethernet M9 4-pole for USB M9 3-pole for cameras	
Power consumption	Normal operation 12V / approx. 1A (without external peripherals) Standby 12V / approx. 4mA Idle 12V / approx. 2mA	
Microcontroller	1 x ATSAMA5D36 / 536MHz (ARM Cortex -A5)	
Mass storage	8GB eMMC	
Main memory	512MB LPDDR2	
Time recording	Real-time clock, battery backed	
Interfaces	1 RS232, maximum baud rate: 115kBaud 1 CAN 2.0B, maximum data rate: 1Mbit/s 1 Ethernet, maximum data rate: 100Mbit/s 1 USB 2.0 High Speed Host, maximum data rate: 480Mbit/s	
Inputs	1 activation input (terminal 15) 3 camera inputs (composite video signal) with 12V exit for a total of 1A	



Signal transducer	internal acoustic signal transducer     internal optical signal transducer (front-LED)	
Protection	Reverse polarity protection, pressure compensation element	
Operating temperature	-30 70°C (ambient)	
Mounting	VESA MIS-D 100x100mm	
EMV	Road vehicles:	2014/30/EC (2004/108/EC), ISO 10605, ISO 7637-1, ISO 7637-2, ISO 7637-3
	Construction machinery	EN 13309
	Agricultural, forestry machinery:	Directive 2009/64/EG, EN ISO 14982
	Industrial use:	61000-6-2, EN 61000-6-4