



## Mobile Display HY-eVision<sup>2</sup> 7.0

### Description

The compact, back-lit 7" TFT colour display with integrated high-end eVision<sup>2</sup> display controller is notable for its very high image quality, low reflection, high colour saturation and optimal readability, even under the worst of lighting conditions.

The display is protected by a robust metal/plastic housing and can either be built directly into the instrument panel or surface-mounted in the field of vision of the driver/operator using a RAM Mount<sup>®</sup> system in the cockpit.

Ten programmable illuminated control keys create an easy-to-use human-machine interface.

Up to two external cameras can be connected to the display via the two integrated composite video ports, and controlled via software.

Worldwide access to machines for remote maintenance or data collection thanks to optional WLAN or 3G/GPS module. The TTControl Remote Assistance Tool or a standard VNC connection can be used for this.

### Special features

- 7.0" monitor with large angle of view, high contrast ratio
- Programming in CODESYS V3
- Display of PDF files and animations, 3D capability
- 2 analogue camera interfaces with picture-in-picture feature
- Up to 2 digital Ethernet cameras can be connected
- 2 CAN, USB 2.0 Host, RS232, Ethernet
- Option 3G modem with GPS module
- Option WLAN module
- Real-time clock
- Sleep mode (wake-up < 0.5) with shutdown and wake-up pin and wake-up timer
- Operation possible in 12 V and 24 V systems
- Waterproof and dustproof IP 6K5 housing
- E12 type approval

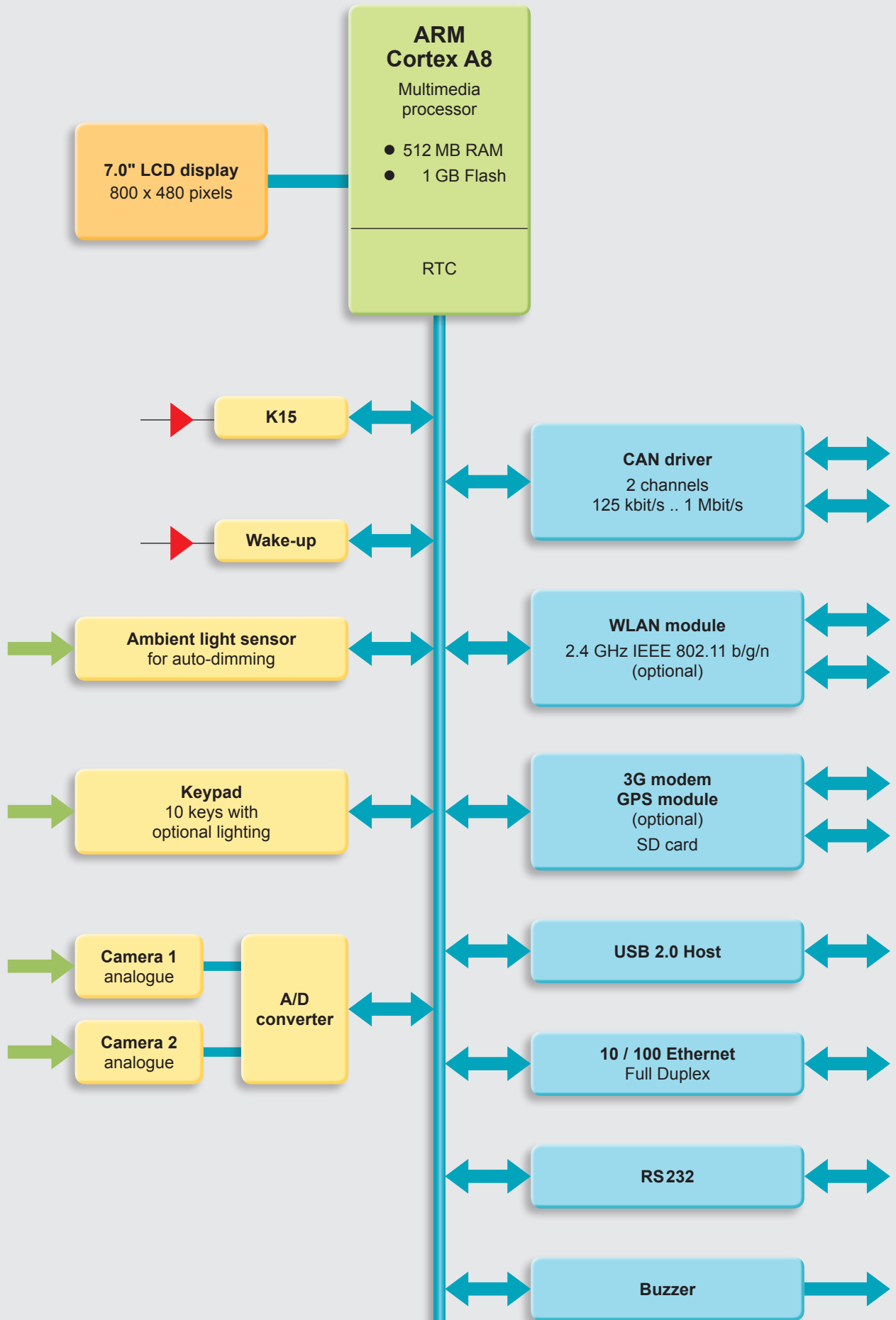
### Technical data

Environmental conditions	
Operating temperature	-30 .. +60 °C (environment)
Storage temperature	-30 .. +80 °C
Supply voltage	9 .. 32 V DC
Fulfils the following standards	
CE mark	Compliant with 2014/30/EU
E-mark	ECE-R10
EMC	EN 13309
ESD	ISO 10605
Electrical	ISO 16750-2, ISO 7637-3
Protection class	ISO 20653 IP6K5
Temperature	ISO 16750-4
Vibration, shock, bump	ISO 16750-3
Dimensions and weight	
Housing dimensions	235 x 135 x 52.4 mm
Housing material	Front powder-coated die-cast housing, rear side plastic
Weight	1.2 kg
Display	
Screen diagonal	7.0" (17.8 cm) / 16:9 format
Pixels	800 x 480
Active area	152.4 mm x 91.4 mm
Pixel size	0.1905 mm x 0.1905 mm
Luminance	500 cd/m <sup>2</sup>
Viewing angle	Vertical: ±60° / horizontal: ±70°
Contrast ratio	600:1
Reaction time	5 ms
LCD type	TFT (active matrix)
Backlight	LED
Life expectancy of backlight	≥ 50,000 h at +25 °C (constant)
Features	
LCD with backlight and high contrast	
Auto-dimming via ambient light sensor	
32-bit ARM Cortex A8 microcontroller, 800 MHz, 1 GB Flash, 512 MB RAM (option 512 MB Flash, 256 MB RAM)	
34-pole central male connector	
K15 for ignition input	
2 x composite video interface for external camera	
2 x CAN interface, 125 kbit/s .. 1 Mbit/s	
1 x RS232 and 1 x Ethernet interface 100 Mbit/s	
1 x USB 2.0 Host	
Option WLAN interface; 2.4 GHz IEEE 802.11 b/g/n standard (operation and availability only within EU (EEA))	
Option 3G modem with GPS module (operation and availability only within EU (EEA))	
Buzzer	
Real-time clock (RTC, buffered with GoldCap)	
Sleep mode (wake-up < 0.5 s) with shutdown function	
Wake-up pin, wake-up timer (via RTC)	

**Note:** All external interfaces (except USB) are protected against short circuit to GND and BAT+.

## Block circuit diagram

### HY-eVision<sup>2</sup> 7.0



## Model code

HY-eVision<sup>2</sup> 7.0 – XX – X – X – 00 XX 00 – E – 000

### Firmware

00 = only operating system  
 CD = CODESYS run-time system  
 for CODESYS development environment

### RAM memory

Q = 256 MByte  
 P = 512 MByte

### Flash memory

P = 512 MByte  
 R = 1 GByte

### Functional safety

00 = standard (none)

### Equipment options

00 = none  
 05 = WLAN  
 07 = 3G modem with GPS function

### Operating options

00 = none

### Resolution

E = 800 x 480 pixels

### Modification number

000 = standard

### Note

Devices with the options WLAN (05) or 3G/GPS (07) are only marketed within the EU and must only be operated within the EU.

On devices with a different modification number, please read the name plate or the technical amendment details supplied with the device.

### Accessories

Appropriate accessories, such as cable harnesses, cabling and connection technology, service tools and software can be found in the Accessories section.

## Note

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications and corrections.

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## Dimensions

