

### Color display and CANopen support

Curtis has developed the Engage series of instruments for commercial vehicles. They provide CAN connectivity with an optional CANopen protocol stack.



The Engage VI and VII human machine interfaces come with a 3,5-inch respectively 5,7-inch display (Source: Curtis)

The Engage VI and VII instruments are based on a micro-controller and feature I/O capability. They also provide two video interfaces for cameras. The 3,5-inch respectively 5,7-inch color LCDs. They enable a clear viewing even in bright sunlight, claims the supplier. The products can be used up to -40 °C, when a heater is installed. Otherwise the operating temperature is limited to -20 °C. Of course, the devices are compliant to the relevant EN standards (e.g. 61000 series) and SAE recommendations for mobile machinery (e.g. J1455 and J1378). The housings are IP67-rated.

The Classical CAN interface can optionally be galvanic isolated. One variant comes just with CAN connectivity and no I/O lines. Optionally, a CANopen protocol stack is available. The connector featuring CAN access has pins for CAN-H, CAN-L, common ground, shield as well as two pins for connecting the 120-Ohm termination resistor, in case, the display is at one of the far ends of the CAN network.

The company offers also the Engage IV instrument, which is also CANopen compatible. It is IP65-rated. The digital instrument comes with local I/O lines and an LCD with backlit.

[hz](#)