

REAL-TIME BOX PC

## For automated guided vehicles and robots

**Syslogic's (Switzerland) embedded box PC OEM S81 is a rugged industrial computer for real-time applications. It is designed for automated guided vehicles (AGVs), for mobile industrial robots (MIR), and for autonomous mobile robots (AMR).**



*Sensors are controlled directly; These features make the embedded computer suitable for controlling AGVs or robots (Source: Syslogic)*

The box PC uses WiFi, GNSS, or LTE to communicate with other devices or with the cloud. Moreover, high-precision GNSS receivers can be integrated. They allow location tracking of an AGV or MIR. With two CAN interfaces, the device can be used as a CAN network. CAN drivers like SocketCAN and LinCAN or higher-layer protocols like J1939 are pre-installed on the operating system. The product has also four Ethernet interfaces, each with its own NIC (network interface controller) for latency-free sensor control.

System upgrades are implemented through a Mini PCI Express interface. MicroSD or CFast slots are available for flash storage. Measuring 174 mm x 50 mm x 127 mm, the

design is suitable for use in AGVs or mobile robots. The box PC complies with the standard for ground conveyors and industrial trucks EN 1175-1:1998+A1:2010.

The company specifically develops and manufactures its industrial computers for industrial applications. Its embedded systems are distinguished by maintenance-free operation and a long service life, the company explained. Furthermore, Syslogic offers availability of its embedded systems as well as a fixed BOM (bill of material). To this effect, the product fits into the company's product portfolio. The product comes with IP40 protection classification which means that it is resistant to shock and vibration. It is also designed for the extended temperature range of -40 °C to +70 °C.

The embedded computer is suitable for OEM (original equipment manufacturers) manufacturers and system integrators. It is delivered with a preconfigured operating system. To meet a variety of requirements, various Windows or Linux versions are available, including Windows 10 IoT Enterprise 2019 LTSC and Ubuntu 20.04.1 LTS. Furthermore, the box PC can be combined with a robot operating system.

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