# CAN *Newsletter Online*

I/O module switches connected devices in e-bikes

Pironex (Germany) offers a range of products for charging and controlling e-bikes, pedelecs and e-cars. Part of the product range is the piCAN-Station, an Energybus-compatible I/O module, which can switch connected devices (for example electronic door openers) and read signals.

Via the CAN network the module is supplied with 12 V power and can be integrated into a CAN network system. External sensors can be connected to the 12 V inputs. The necessary configuration of the CAN-Node-ID is carried out via hex-encoding switch. Through its integrated CANopen stack this device is Energybus-compatible and enables control of Bike Boxes via Energybus. The module features a CAN-I/O interface for device control, a CANopen I/O expander, and stationary control electronics. The module's processor is a 16-bit micro-controller with CAN, it has a temperature range of 0 °C to 85 °C, and its enclosure measures 131 mm x 110 mm x 38 mm. The freely programmable micro-controller and an integrated EEPROM enable the programming according to customer requirements.
The embedded micro-controller software runs with CAN/EB/CANopen. Other features are a buzzer, status LEDs, a Hex-switch for CAN-ID, and 2 kbit EEPROM.
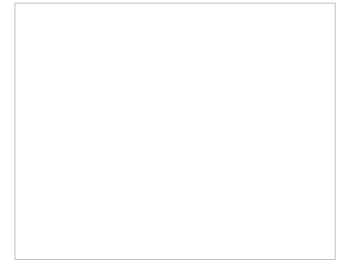
Other members of the product range with CAN are the piCAN-Terminal, which integrates a CAN/CANopen device with display, RFID 13,65 MHz reader and I/O interfaces; the piCAN-Charger, which, with its fanless design, enables the use of the charger in a rough environment, e.g. in private or public e-bikes and pedelecs charging and rental systems; and the piCAN-Bike-Adapter, which allows the connection of not-Energybus-compatible batteries into an Energybus system.