

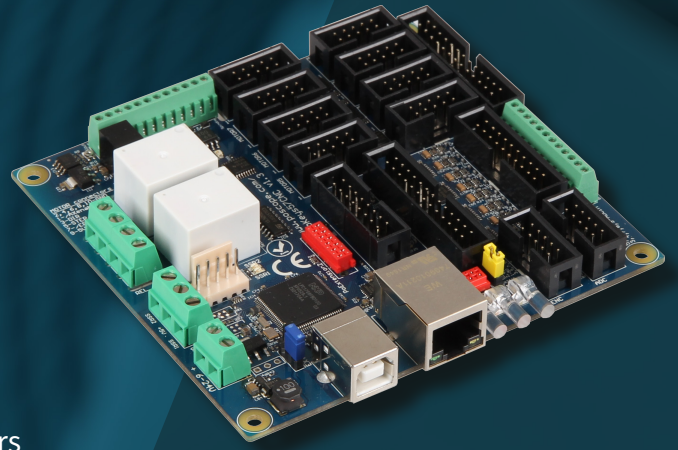
# POKEYS 57CNC

HIGH-PERFORMANCE CNC CONTROL FOR UP TO 8 AXES

JOY-IT

## SPECIAL FEATURES

- ✓ Control of up to 8 CNC axes with 125 kHz pulse frequency
- ✓ USB & Ethernet connection with web interface
- ✓ Support for Mach3, Mach4 & Modbus TCP
- ✓ 28 digital I/Os, 5 PWM outputs and 5 analog inputs
- ✓ High-speed encoder & ultra-encoder input
- ✓ Isolated 0 - 10 V spindle output for interference reduction
- ✓ Expandable via PoExtBus/PoNET and up to 100 I2C sensors



The PoKeys 57CNC is a powerful CNC controller with USB and Ethernet interface for precise control of up to 8 axes. It is ideal for industrial and semi-professional applications in machine control, automation and system integration.

The controller supports Mach3 and Mach4 PoKeys plug-ins as well as Modbus TCP and offers direct network access to configuration and diagnostics via an integrated web interface. Communication with the host system can be carried out flexibly via USB (1.1/2.0 HID-compatible) or Ethernet (10/100 Mbit, DHCP or static). The controller also supports the simulation of a USB keyboard and a USB joystick with 6 axes and 32 buttons. These functions enable versatile adaptation to different control scenarios. The combination of network capability, USB functionality and software compatibility makes the PoKeys 57CNC a central interface for complex control systems.

The extensive I/O equipment includes 28 digital inputs and outputs, 5 PWM outputs (up to 25 MHz, two of which are open collector) and 5 analog inputs with low-pass filtering. The system is supplemented by several encoder inputs and a 125 kHz pulse control for up to eight axes.

An isolated 0-10 V output for spindle control protects against interference. Extensions such as relay cards, keyboard modules, HD44780 displays or up to 100 I2C sensors can be connected via the PoExtBus/PoNET interfaces. The controller is supplied with 6-26 V DC and works reliably at temperatures of 0-60 °C. With compact dimensions of 110 × 105 mm, the device can be easily integrated into existing systems.

## MAIN FEATURES

Special features	Supports Mach4 & Mach3 PoKeys plugins, Modbus TCP support, Web Interface, Isolated 0 - 10 V output for spindle control (noise isolated from controller), Additional connection for HD44780 LCD devices (up to 4x20 characters), PoExtBus/PoNET support to add PoNet-KBD48CNC, PoPendant1C, PoRelay8, PoExtBusOC16 and up to 100 I2C sensors
USB support	Compatible with USB 1.1/2.0 HID standards, English USB keyboard simulation, USB joystick simulation (6 axes, 32 keys)
Ethernet	Ethernet 10/100 with DHCP and fixed IP support
Digital I/O	28 digital I/Os with pull-up resistors
PWM outputs	5 freely configurable, high-speed PWM outputs (25 MHz PWM timer) (including two with open collector transistor outputs)
Analog inputs	5 analog inputs (12 bit) with digital low-pass filtering (4 analog inputs also support analog low-pass filtering with 1.9 kHz crossover frequency)
Encoder	Multiple encoder pair inputs with three additional dedicated high-speed encoders and one ultra-high-speed encoder input
Pulse motor	High-performance 8-axis 125 kHz pulse drive with additional motor connections
Keypad support	Support for a keypad up to 16x8 in size
Connection	Ethernet or USB connection to the host device

## OPERATING SPECIFICATIONS

Power supply	6 - 26 V DC with at least 2.5 W
Operating temperature	0 - 60 °C
Storage temperature	-40 °C - 85 °C

## ADDITIONAL INFORMATION

Weight	120 g
Dimensions	110 x 105 mm
Article no.	PoKeys57CNC
Items delivered	PoKeys57CNC
Customs tariff number	8537109000
EAN	4250236815428