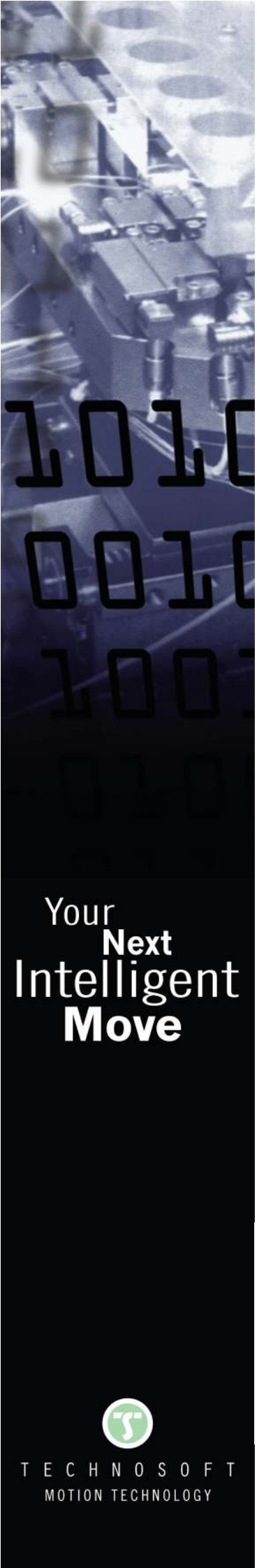


iPOS4808 MY Intelligent Servo Drive 400 W

Compact Drive Solution for Rotary or Linear Brushless, DC Brush and Step

Description

The iPOS4808 is based on a new design concept offering a cost effective, compact and modular solution for the control of rotary or linear brushless, DC brush, and step motors of powers up to 400 W, with 50 V nominal voltage.

Modularly designed to cover from low- to high-volume applications, iPOS4808 integrates all the basic motor control functions and the motion control functionality on a single plug-in module. A series of I/O signals, both digital and analogue, are available for easy interfacing with the application.

Thanks to the TML (Technosoft Motion Language) instruction set, the iPOS4808 is an intelligent drive programmable at user's level. In systems that request a host, the iPOS drive operates as an intelligent slave executing motion sequences triggered by input lines or commands received via RS-232, CAN bus or EtherCAT communication.

Advanced positioning profiles like the PVT or electronic caming, I/O and program flow control, data transfer between axes, subroutines, ISRs and multiple homing modes ease the motion application implementation task.

Dual Loop

Equipped with 2 feedback connectors, the iPOS4808 MY provides advanced dual-loop control schemes that minimize the transmission backlash negative effects.

EasyMotion Studio

The configuration, tuning and programming of the iPOS4808 drive is easy with Technosoft's powerful graphical platform, EasyMotion Studio.

iPOS4808 MY Features

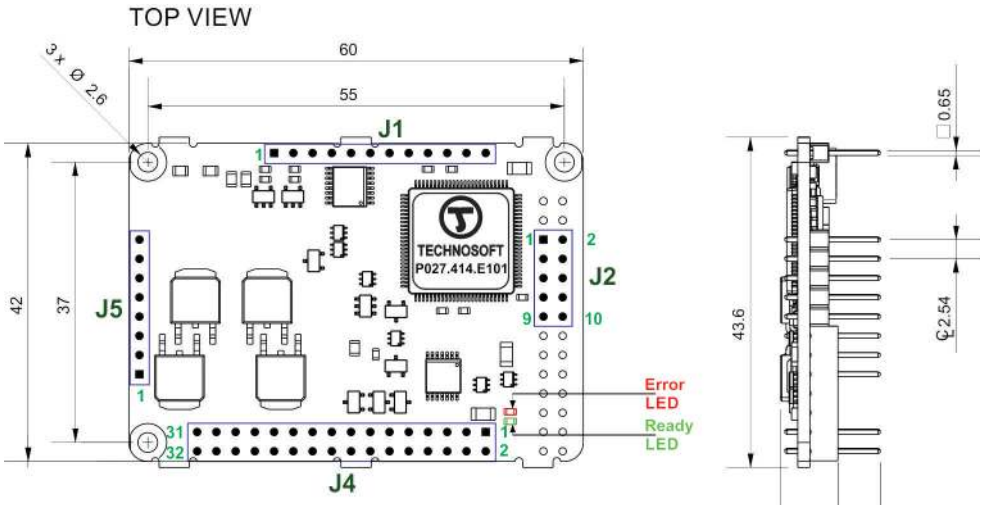
- **Fully digital servo drive suitable for the control of rotary or linear brushless, DC brushed, and step motors**
- **Sinusoidal (FOC) or trapezoidal (Hall-based) control of brushless motors**
- **Open or closed-loop control of 2 and 3-phase steppers**
- **Various modes of operation, including: torque, speed or position control**
- **Standalone operation with stored motion sequences**
- **Drive enable circuit**
- **Communication:**
  - **RS-232 serial up to 115kbits**
  - **CAN-Bus up to 1 Mbit/s with TMLCAN and CANopen (CiA 301, CiA 305 and CiA 402) protocol**
  - **EtherCAT (CoE protocol) via additional extension module**
- **Digital and analogue I/Os:**
  - **6 digital PNP/NPN programmable inputs, 5 - 36 V**
  - **5 NPN digital outputs, 5 - 36 V, 0.5 A**
  - **2 analogue inputs: 12 bit resolution, 0 - 5 V**
- **Feedback devices (dual-loop supported) :**
  - **1st Feedback :**
  - **Incremental quad encoder (single ended or differential)**
  - **Analogue sine/cosine encoder (differential 1Vpp)**
  - **Digital and linear Hall sensors**
  - **2nd Feedback :**
  - **Incremental quad encoder (differential)**
  - **pulse & direction interface (differential)**
  - **BiSS / SSI encoder interface**
- **Power supply: 11 - 50 V; Logic supply: 9 - 36 V**
- **High current capability (8 A continuous, 20 A peak current)**
- **127 H/W selectable addresses by H/W pins configuration**
- **Protection to over-current, over temperature, short-circuit, over- and under-voltage, I2t, control error**

iPOS4808 MY Starter Kit

Application notes with TML program examples available at www.technosoftmotion.com.

TECHNOSOFT
MOTION TECHNOLOGY

Dimensions, Specifications, Ordering Information



Drawing not to scale
Tolerance ± 0.1mm (unlesss otherwise noted)
Weight: 22g

EasyMotion Studio

The high level graphical development environment EasyMotion Studio, supports the configuration, parameterization and programming of the drive, with:

- Motion system set-up wizard
- Tuning assistance with capture functions
- Definition, programming and testing of motion sequences

Motion Control Libraries

The TML_LIB Motion Control Libraries can be used to implement a motion control application on a PC from C / C++, C#, Visual Basic, Delphi or LabVIEW under Windows or Linux operating systems.
If a PLC is used as host, implementations of the TML_LIB observing the IEC-61131 standard are available for Siemens, B&R and Omron PLCs.

iPOS4808 Starter Kit

Complete evaluation packages for the iPOS4808 MY drives, containing the servodrive, motor, I/O board and EasyMotion Studio software are available, supported by application notes and documentation.

iPOS4808 MY Intelligent Servo Drive

Electrical Specifications

Maximum DC supply voltage: motor and logic	50 V
Maximum continuous current	8 A
Peak current (2.4 sec. max.)	20 A
Nominal switching frequency	20 - 100 kHz
Operating ambient temperature	0 °C - 40 °C (*)

(*)or higher temperatures with derating

Ordering Information

P027.414.E101	iPOS4808 MY-CAN Drive, 50 V, 8 A, Pins, 2xEnc., CAN
P027.414.E803	iPOS4808 MY-CAN Starter kit without motor
P027.414.E804	iPOS4808 MY-CAN Starter kit with brushless motor
P027.314.E813	iPOS4808 MY-CAT-STO Starter kit without motor
P034.001.E002	EasyMotion Studio Software
P040.001.Exxx	TML_LIB Motion Library**

**ask for existing libraries types

Flexibility :

Control schemes supported by the iPOS4808 MY Drive

Motor types	Torque Control	Speed Control	Position Control*
Brushless	√	√	√
Brushed	√	√	√
Step	√	√	√

* Dual-loop control supported

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