



#### Digital and Analog I/O extension

Integrated inside the position controller up to 400 VDC / 60 A



#### Configurable I/Os

Selectable voltage levels and direction




#### Fast sampling

Synchronized with control loops

## GPIO

### Optional board

 Engineered for semiconductor equipment  
Suitable for all high-end positioning systems

**Extend the ACCURET+ position controllers with additional I/Os for fast, configurable, and real-time interactions with the machine process. GPIO optional board creates a direct bridge between external devices (camera, laser...) and the control core; eliminating latency, bus delays, and synchronization errors that typical I/O modules would introduce.**

The GPIO optional board adds fast and flexible I/O capability directly inside the ACCURET+ position controller. Installed in the controller's optional bay, it greatly extends functionality while requiring only 25 mm of additional rack space.

Within this compact footprint, ETEL packed eighteen configurable digital I/Os (selectable direction and voltage: 3.3 VDC, 5 VDC or 24 VDC), four analog inputs and four analog outputs ( $\pm 20$  V, 16 bits). This allows seamless integration of a wide range of external sensors or process triggers.

A redesigned connectivity concept with robust industrial connectors adds a practical, user-centric advantage that installers and integrators will appreciate. Separate, dedicated cables for digital and analog channels make wiring cleaner, safer and more modular.

Above all, the true value of the GPIO optional board lies in being mechanically and electrically integrated inside the ACCURET+ controller. Signals are sampled and updated at the same 20 kHz frequency as the position loop, enabling true in-loop reaction for time-critical events such as camera triggering or laser activation.

#### TRUE IN-LOOP INTERACTION

Signals are sampled and updated at 20 kHz, the same rate as the position loop, enabling real-time reaction for time-critical events related to process execution.

#### COMPACT INTEGRATION, NO EXTRA RACK SPACE

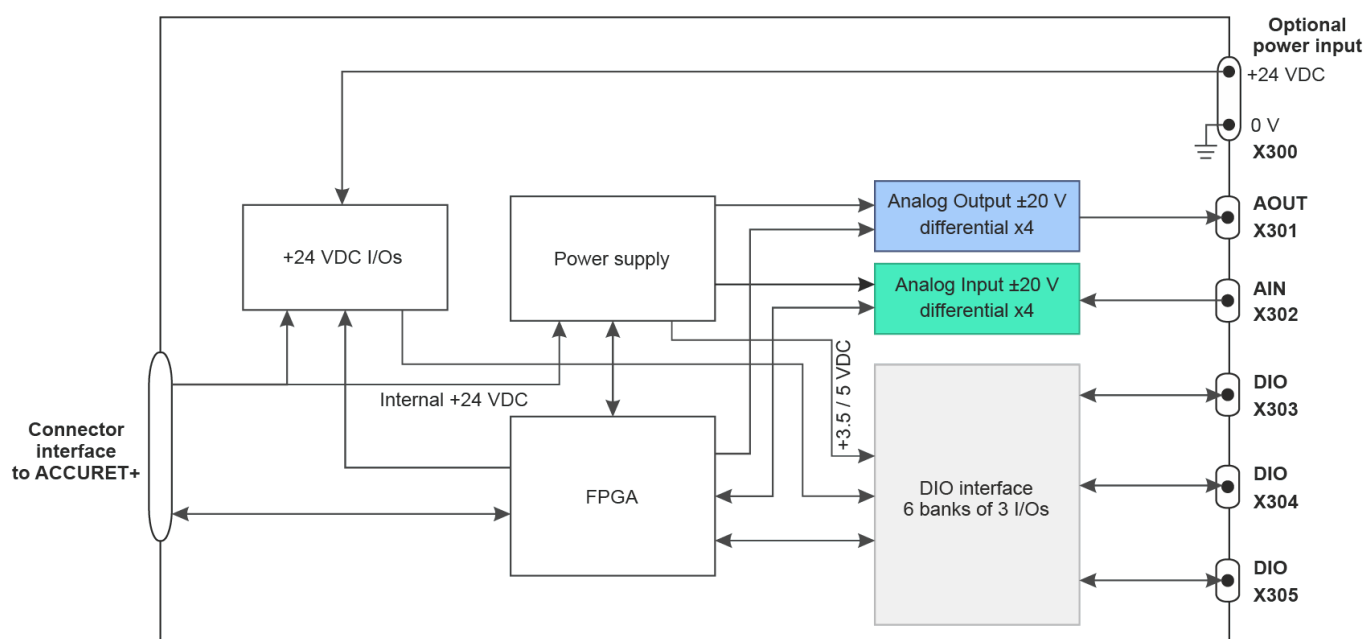
The board installs directly inside the ACCURET+ controller, adding only 25 mm to its width while expanding functionality dramatically.

#### FLEXIBLE DIGITAL AND ANALOG CONFIGURATION

Eighteen configurable digital I/Os and four analog inputs/outputs, selectable in direction and voltage level, adapt easily to any application need.



- > 18 configurable digital I/Os, individually selectable as input or output
- > Digital I/O voltage levels configurable by banks of 3 I/Os: 3.3 VDC / 5 VDC / 24 VDC
- > Optional external 24 V supply input for increased DOUT driving capability (up to 3 A total).
- > Connectivity: 5x iX connectors for simple and robust cabling
- > 4 analog inputs:  $\pm 20$  V differential (40V span), 16 bits
- > 4 analog outputs:  $\pm 20$  V differential (40V span), 16 bits
- > All I/Os sampling and update frequency: 20 kHz (synchronized with control loops)



More info



Ver. 1.1