STANLEY Assembly Technologies

QA ALPHA CONTROLLERS

**Communication in Overdrive**

αALPHA

QPM

The New QA Alpha Controller

New Look – Inside and Out!

The QA Alpha has a sleek new look with its bold and bright interface, larger display and intuitive, graphic-based navigation features.

The new design is elegant as well as functional – making the QA easy to program and run. Improved navigation means that fewer keystrokes are required to set up parameters, assign I/O properties, or run trace data and diagnostics. The Parameter Wizard helps you to create, name and select numerous assembly strategies.
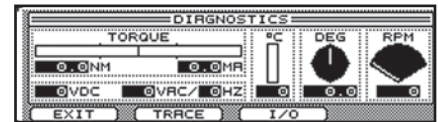
More Power Under the Hood

The new QA Alpha controller is more robust and powerful inside too. You can program and store up to 99 different parameter sets, and run trace analysis and diagnostics right on the controller. Make your assembly process more efficient using Operations Support – a feature that gives you the ability to create a chain of parameter sets. This enables the operator to perform multiple fastenings in one operation. And – when you use the Embedded Toolbox software with your computer and a web browser, you have an even more powerful user interface along with rich analysis and reporting capabilities.

Stay on the Fast Track

Feature upgrades are fast and easy to implement using the brand-new USB port and the optional Stanley USB Memory Stick. Using USB memory can provide backup/restore to your controller. One USB Memory Stick can hold backups for your entire plant, but the price is so economical - you may prefer to use a separate memory stick for each controller.

Embedded Toolbox Software

New and Improved QPM Software - All You Need is Your Web Browser!

The intuitive new Embedded Toolbox software has a graphical interface, making it more user friendly, and allowing you to view the display on your network computer's web browser. It's the only software you need for the QPM system and it's already installed right on your controller. To get started just point your browser at the controller's IP address.

The step-by-step configuration setup is logical and easy. Configuration of the tool, and single or multiple trace data can be viewed, saved or exported for later analysis.
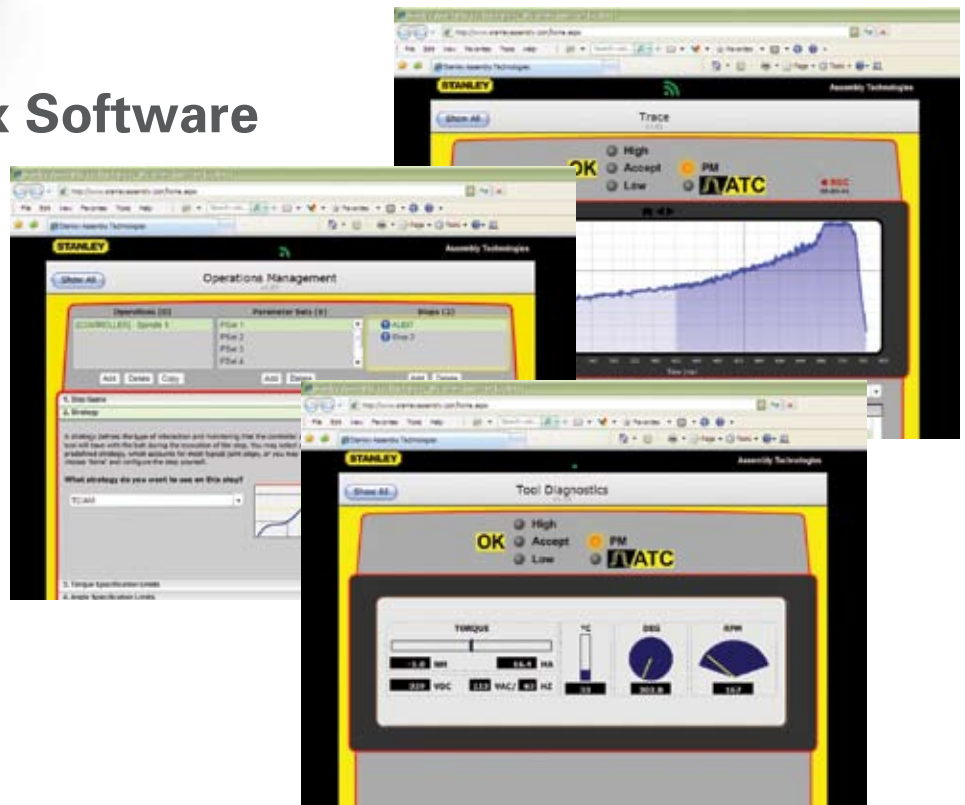
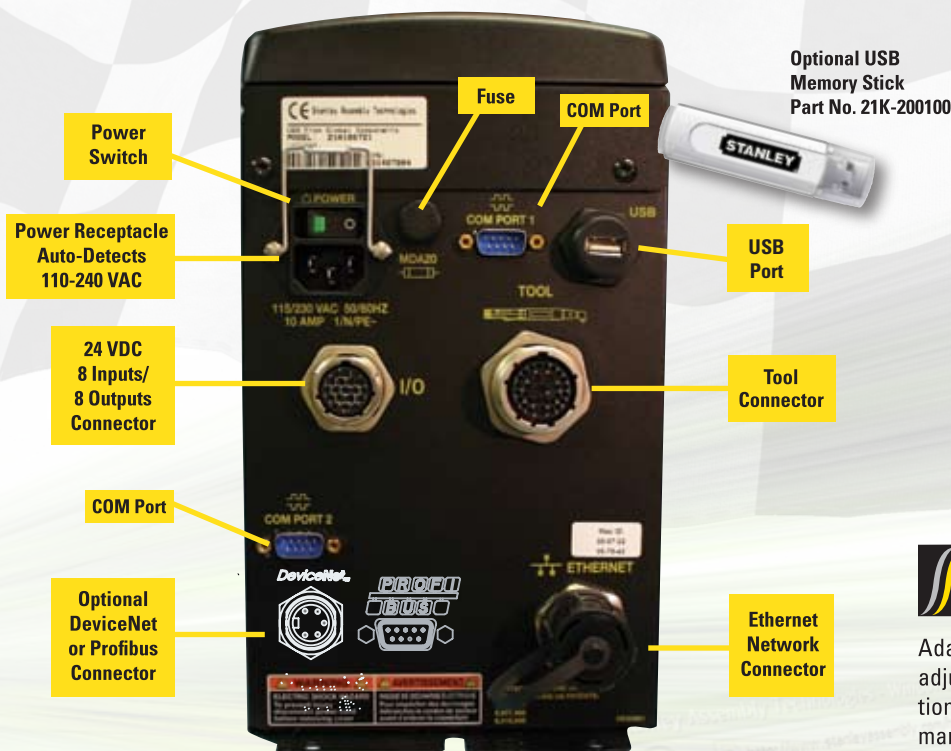# QA Alpha - Ultimate Communication

Input and Output – Better and Faster

Standard Ethernet – Every QA Alpha controller has an Ethernet port as a standard feature, allowing you to connect directly to your plant network. DeviceNet or Profibus connections are also available as an option.

24 VDC Input/Output – The 24 VDC Input/Output option enables error proofing, parameter selection from a socket tray or similar device, and remote control for fixtured tools.

USB Port – You'll also notice a USB port on the QA – an optional USB memory stick enables you to save the parameter sets created with the Parameter Wizard. Transfer parameter sets from one controller to the next, or provide backup and restore for your operation.

Two COM Ports – The QA Alpha includes two COM ports, one for connecting your computer enabling you to remotely configure the tool and controller – and one more allowing you to add a bar code reader, serial printer or serial network connection.

Optional USB Memory Stick Part No. 21K-200100

Fuse
COM Port
Power Switch
Power Receptacle Auto-Detects 110-240 VAC
24 VDC 8 Inputs/ 8 Outputs Connector
COM Port
Optional DeviceNet or Profibus Connector
USB Port
Tool Connector
Ethernet Network Connector

• Reduced times for setup, fastening, rework, and maintenance.
• Increased quality, productivity, ergonomics, and flexibility.

ATC

Adaptive Tightening Control (ATC)* automatically adjusts for different joint designs and part variations during each tightening cycle by dynamically managing speed and power to the motor.
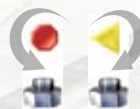
Optimized Error Proofing
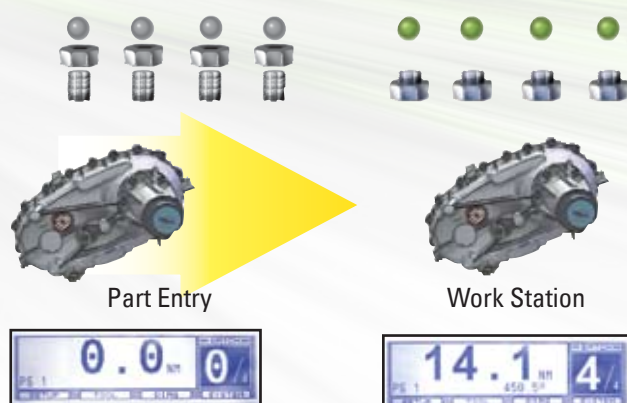
QA Alpha compares actual torque results to quality limits, counts fastened bolts and detects cross-threads, re-hits, slip-offs. Parts exit the workstation only after all bolts are fastened correctly.

Part Entry   Work Station   Part Exit

Bolts that do not meet specifications are identified for rework

QA Alpha Controller Installation Options

QA Alpha Models

Alpha Model Number	Ethernet	Device Net	Profibus	24 VDC I/O	Serial
QA1001-XDV	+	+		+	+
QA1001-XDX	+	+			+
QA1001-XPV	+		+	+	+
QA1001-XPX	+		+		+
QA1001-XXV	+			+	+
QA1001-XXX	+				+

The plinth used on all QA controllers provides convenient and protected cable routing plus quick release mounting for the controller.

Breakout Box with 19-pin subconnector inside makes connecting your controller fast and easy.

19-pin wire connectors

I/O connector

QA Alpha Plinth with breakout box option

breakout box

Breakout Box

The QA Alpha has an optional breakout box I/O module that mounts neatly inside the plinth with a controller connection and 19-pin subconnector cable. With the use of the breakout box, other I/O connections on the controller are not obscured by tangled, bulky cables.

The breakout box provides easy access for controller and tool connection. For new installs, the plinth and connections can be arranged and set up as needed – then the controllers just plug in and run. And – swapping out controllers is now fast and hassle-free.

QA Alpha 24V I/O Options

Part No.	19-pin 24V I/O Port	Included
21C104800	Mating Connector - Solder pins	Standard
21C104802	Mating Connector - Crimp pins	Optional
21C104804	Mating Connector - Crimp pins, crimp tool	Optional
21E102202	Breakout Box	Optional
21C202005	Extension Cable 5M	Optional
21C202010	Extension Cable 10M	Optional
21C202020	Extension Cable 20M	Optional