ALSPA Communicators

The latest generation of communicators for GEM80, ALSPA 8000 PLC's and Variable Speed Drives

The new generation of ALSPA Communicators provides an easy to use, robust operator interfaces for PLC's such as - GEM80, ALSPA 8000 and also Variable Speed Drives.

Standard features include:

- Remote monitoring and operation
- Up to five RS232/422/485 comms ports
- Built in Ethernet comms
- Integrated Web Server
- Compact Flash Support
- Data Logger
- High performance 32-bit processor
- Protocol converter
- Serial, USB or Ethernet programming
- Program Upload

The ALSPA G3 series has the latest on board connections ports of any HMI currently available – it lets you web and network enable many different types of hardware using integrated ethernet.

Available Range

The three models available combine unique capabilities making use of the most appropriate display technology for each situation.

- ALS-G303 3.2" Monochrome Operator Panel
- ALS-G308 7.7" DSTN Colour Touch Panel
- ALS-G310 10.4" TFT Colour Touch Panel

Programming Tool

The new ALSPA G3 range of communicators is programmed using Crimson 2 software. This powerful programming gives the series a number of exclusive functions. Its sophistication makes all the complex capabilities manageable, with user friendly drag and drop mapping.

Crimson includes an extensive library of device drivers to quickly establish communications between the ALSPA G3 and virtually any device.

Once communication is established, anything the ALSPA G3 can communicate with is now Ethernet enabled via the built in gateway and protocol converter – this capability is unavailable in any other HMI panel.

Extensive library provides over 40,000 industrial and manufacturing symbols including push buttons, tanks, motor valves etc – all in an easy categorised form.

Fast data transfer and download

The Program can be downloaded using a standard RS232 port, or high speed downloads can occur when using either the USB or Ethernet connection.

Standard Ports

Serial

One RS422/485 port and two RS232 ports are standard, each port is format and Baud rate programmable up to 115200 Baud. An additional RS232 and RS422/485 port are available with an option card, providing up to five comms ports per ALSPA G3 HMI.

Ethernet

Built in 10 Base T/100 Base TX Ethernet Port, this can be used to connect to Ethernet devices for example ALSPA and GEM80 PLC TCP/IP ethernet modules. A single connection can be used to connect to multiple devices using multiple protocols.

The ethernet port can also be configured as a web server allowing remote access to the panel using standard web browser.

Complete range for all your needs

Built in web service
Web pages can be written using the Crimson Software by simply adding tags to a page or you can use it to create your own pages using your preferred editing tool. These pages are stored on the optional CompactFlash card for recall via the web server. Finally, you can enable Crimson Virtual Panel, a unique remote access and control feature, which allows a web browser to not only view the ALSPA G3's display in real time, but control its keypad and operate any of its Ethernet – enables devices remotely. This feature is only available in the ALSPA G3 HMI series.

The ALSPA G3 ethernet can also be used to program the panel.

Multi device data Logging
Crimson allows users to quickly set up any number of devices in a control application, collect performance data, display it, store it for evaluation, or trigger PLC functions with one panel either live or remotely.

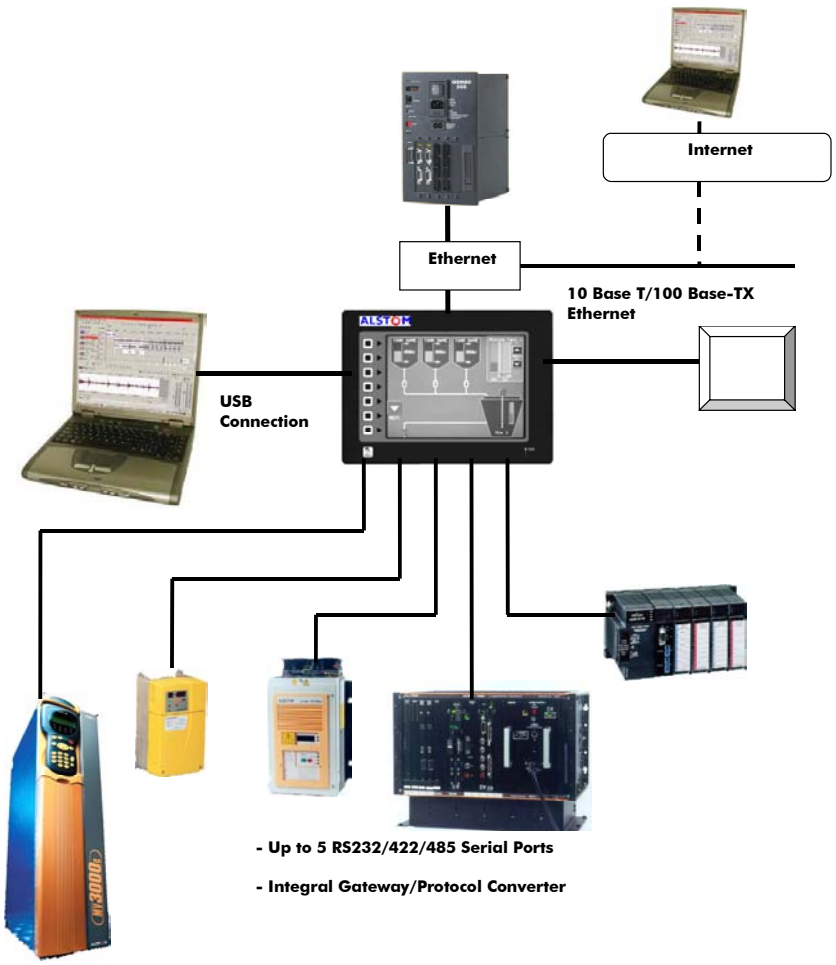
Data storage with compact flash
The integrated and Compact Flash slot accommodates inexpensive and readily available type I and II CompactFlash cards. The Compact Flash card can be used to store the panels program, web pages and Logged data.

Faster Data transfer and download
The ALSPA G3 HMI series features a convenient USB port for fast downloads of configuration files from a PC as well as trending and data logging uploads to your PC for analysis.

Powerful processing
The ALSPA G3 HMI series features an onboard 32 bit processor for unmatched computing capability. The full features Crimson contains a built in "C" compiler to create custom programs for complex applications, recipe handling, realtime scheduling, math expression evaluation.

Faster Configuration and programming
Crimson 2 is a powerful set of icon based, configuration, display, control and data logging tools designed specifically to take full advantage of the G3 HMI series architecture.

ALSTOM's G3 communicator series can not only communicate with up to 5 different types of serial device simultaneously – but it also lets you access, monitor and control these devices remotely over your network – or around the globe.



The ALS-G3 operator interface terminal combines unique capabilities normally expected from high-end units with a very affordable price. It is built around a high performance core with integrated functionality. This core allows the ALS G3 to perform many of the normal features of the ALSPA range of operator interfaces while improving and adding new features.

The ALS-GS is able to communicate with many different types of hardware using high speed RS232/422/485 communications ports and Ethernet 10 Base T/100 Base-TX communications. In addition the ALS-G3 features USB for fast downloads of configuration files and access to trending and data logging. A Compact Flash socket is provided so that Flash cards can be used to collect your trending and data logging information as well as to store larger configuration files.

In addition to accessing and controlling of external resources, the ALS-G3 allows a user to easily view and enter information. The unit uses a Liquid Crystal Display (LCD) modules, which is easily readable in both indoor and outdoor applications.

ALS – G303

Graphic LCD Operator Interface Terminal

- Configured using Crimson software (version 2.0 or later
- Up to 5 RS-232/422/485 communications ports (2 RS-232 and 1RS-422/485 on board, 1 RS-232 and 1 RS422/485 on optional communication card.
- 10 Base T/100 Base-TX Ethernet Port to network units and host web pages.
- USB Port to download the units configuration from a PC or for data transfers to a PC.
- Units configuration is stored in non-volatile memory (4Mbyte Flash)
- CompactFlash ® Socket to increase memory capacity
- 3.2 inch 128 x 64 pixel LCD with yellow LED backlight, able to support text and simple graphics.
- Outdoor unit with UV rated overlay available.
- 32 button keypad with user identifiable keys, navigational keys, numeric keys, keys for on-screen menus, and other various keys.
- Three user programmable front panel LED's
- Power unit from 24VDC ±20% supply
- Powerful 32-bit ColdFire processor
- Remote Web access and control facility
- USB port for configuration download
- 24V DC operation

ALS - G308

Graphic LCD Operator interface terminal with VGA Display and touchscreen

- Configured using Crimson software (version 2.0 or later)
- Up to 5 RS-232/422/485 communications ports (2 RS-232 and 1RS-422/485 on board, 1RS-232 and 1RS422/485 on optional communications card)
- 10 Base T/100 Base TX-Ethernet Port to network units and host web pages
- USB Port to download the units configuration from a PC or for data
- Units configuration is stored in non-volatile memory (8Mbye Flash)
- CompactFlash® Socket to increase memory capacity
- 7.7 inch DSTN Passive Matrix 256 colour VGA 640 x 480 pixel LCD module
- 7-button keypad for on screen menus
- Three user programmable front panel LEDs
- Power unit from 24VDC ±20% supply
- Resistive Analog touchscreen
- Powerful 32-bit ColdFire processor
- Dedicated menu key and 6 soft keys
- Integrated protocol converter
- Remote web access and control facility
- NEMA 4X/IP66 Front panel
- 24V DC operation

ALS – G310

Graphic LCD Operator Interface terminal with VGD display and touchscreen

- Configured using Crimson software (version 2.0 or later)
- Up to 5 RS-232/422/485 communications ports (2 RS-232 and 1RS-422/485 on board, 1 RS-232 and 1 RS422/485 on optional communications card)
- 10 Base T/100 Base-TX Ethernet Port to network units and host web pages
- USB Port to download the units configuration from a PC or for data transfers to a PC
- Units configuration is stored in non-volatile memory (8Mybte Flash)
- CompactFlash Socket to increase memory capacity
- 10.4inch TFT 256 colour VGA 640x480 pixel LCD
- Sunlight Visible outdoor unit with UV rated overlay available
- 8-button keypad for on-screen menus
- Three user programmable front panel LED's
- Power unit from 24VDC ±20% supply

Technical Specification

	G303	G308	G310
Power Requirements	+24 VDC ± 20% 9.5 w Maximum. Must use Class 2 or SELV rated power supply. Power connection via removable three position terminal block.	+24 VDC ± 20% 9.5 w MAXIMUM. Must use Class 2 or SELV rated power supply. Power connection via removable three position terminal block.	**G310C**: +24 VDC ± 20% @ 33W maximum **G310S:** +24 VDC ± 20% @ 50W maximum Must use Class 2 or SELV rated power supply. Power connection via removable three position terminal block.
Battery	Lithium coin cell. Typical lifetime 10 years	Lithium coin cell. Typical lifetime 10 years	Lithium coin cell. Typical lifetime 10 years
Display	3.2" 128 x 64 pixel FSTN LCD with yellow LED backlight for characters and simple graphics applications	LCD Module Displays Size – 7.7 inch, type – DSTN, Colours – 256 VGA, Pixels 640 x 480, Brightness 120 cd/m, Backlight – 40,000 HR TYP	LCD Module Display **Model** / **G310C** / **G310S** Size: 10.4 – inch / 10.4 inch Type: TFT / TFT Colours: 256 VGA / 256 VGA Pixels: 640 x 480 / 640 x 480 Brightness: 350 cd/m / 850 cd/m^2 Backlight: 50,0000 HR TYP / 20,000 HR TYP
Keypad	32 – key keypad 8 user legendable keys, 5 navigational keys, 10+2 numeric keys, 4 dedicated keys, and 3 soft keys for on screen menus	7- key keypad for on screen menus. Touchscreen – resistive analog	8 key Keypad for on screen menus Touchscreen: resistive analog
Memory	On Board user memory: 4 Mbyte of onboard non-volatile Flash memory Memory Card: CompactFlash Type II slot for Type 1 and Type II CompactFlash cards	On Board user memory: 4 Mbyte of onboard non-volatile Flash memory Memory Card: CompactFlash Type II slot for Type 1 and Type II CompactFlash cards	On Board user memory: 4 Mbyte of onboard non-volatile Flash memory Memory Card: CompactFlash Type II slot for Type 1 and Type II CompactFlash cards
Environmental Conditions			
Operating Temperature range	0 to 50°C	0 to 50°C	0 to 50° C
Storage Temperature range	-20 to 80° C	-20 to 80 °C	-20 to 80° C
Operating and storage humidity	80% maximum relative humidity (non condensing) from 0 to 50° C	80% maximum relative humidity (non condensing) from 0 to 50°C	80% maximum relative humidity (non condensing) from 0 to 50°C
Altitude	Up to 2000 meters	Up to 2000 meters	Up to 2000 meters

ALSTOM

Power Conversion, West Avenue, Kidsgrove, Stoke-on-Trent, ST7 1TW
Tel: +44 (0) 1782 781010 Fax: +44 (0) 1782 781133