XPosition

Quick Start Guide

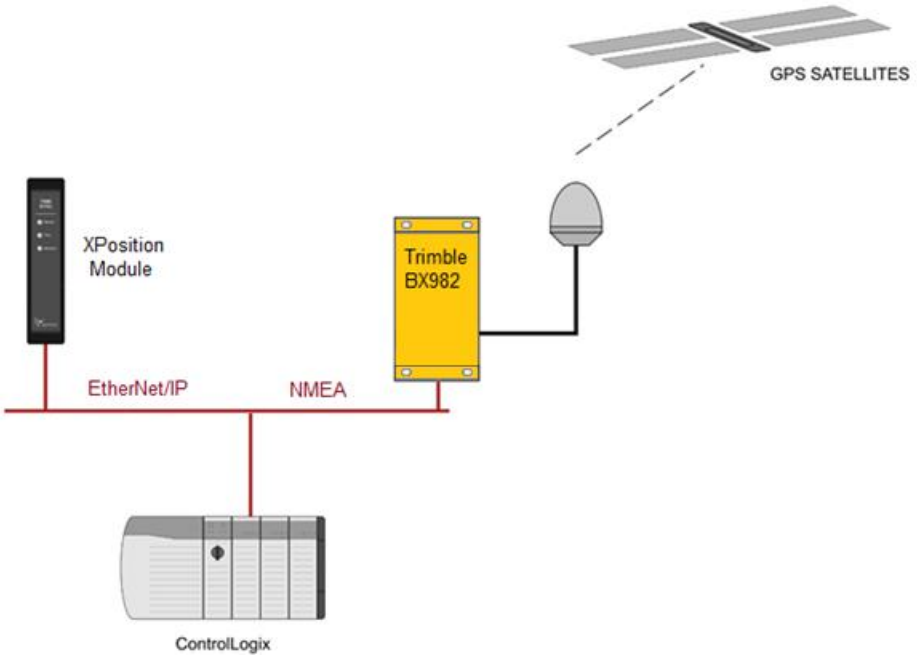
A-XGPS

NOTE: Before installing, configuring, operating, or maintaining Aparian products, please review this information and the information located on www.aparian.com for the latest software, documentation, and installation files specific to your Aparian product.

INTRODUCTION

This quick start guide provides an basic overview of the installation, operation, and diagnostics of the Aparian XPosition module. The XPosition Module provides an interface to high accuracy positioning equipment which can be used across a range of position sensitive applications.

The XPosition module provides a method for connecting high precision GPS and inertial navigation devices to Rockwell Automation's Logix (ControlLogix and CompactLogix) family of controllers. Any third party Device can be interfaced to, provided it supports NMEA communications over Ethernet.



REQUIRED SOFTWARE

The XPosition requires Aparian Slate software to setup and configure. The software installation can be found at www.aparian.com/software/slate.

MODULE INSTALLATION

The module has three ports at the bottom of the enclosure as shown in the figure below. The ports are used for Ethernet, RS232 serial, and power. The power port uses a three way connector which is used for the DC power supply and the earth connection.

NOTE: The RS232 for this module is reserved and should not be used.



LED	Description
Module	The module LED will provide information regarding the system-level operation of the module. Thus if the LED is red then the module is not operating correctly. For example if the module application firmware has been corrupted or there is a hardware fault the module will have a red Module LED. If the LED is green then the module has booted and is running correctly.
Activity	The activity LED will flash every time a packet is received from the external GPS receiver. When the LED flashes green the external GPS receiver has position fix whilst a red flashing LED indicates that the GPS receiver must still obtain position fix.
Ethernet	The Ethernet LED will light up when an Ethernet link has been detected (by plugging in a connected Ethernet cable). The LED will flash every time traffic was detected.

ELECTRICAL AND ENVIRONMENTAL

Specification	Rating
Power requirements	Input: 10 – 28V DC
Power consumption	1.7 W (Max.) Current: 70 mA @ 24 V
Temperature	-20 – 70 °C

NETWORK SETUP

1. Launch the Aparian Slate Configuration Software. Select the *DHCP Server* under the *Tools* menu. DHCP is enabled as factory default.
2. Click the *Assign* button and set the IP Address. Row turns green if successful.
3. Additional configuration can be set using the *Target Browser* also under the *Tools* menu. Right click on the module in the Target Browser a select *Port Configuration*.

STUDIO 5000 CONFIGURATION

The module must be added to the Logix IO tree using the Generic Module profile.

NORTH AMERICAN HAZARDOUS LOCATION APPROVAL

The following information applies when operating the product in hazardous locations:

SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C AND D HAZARDOUS LOCATIONS, OR NONHAZARDOUS LOCATIONS ONLY.
-20°C to +70°C, T5A
Class 1, Div 2 Gps A, B, C, D

THIS EQUIPMENT IS OPEN-TYPE DEVICE AND IS MEANT TO BE INSTALLED IN AN ENCLOSURE SUITABLE FOR THE ENVIRONMENT SUCH THAT THE EQUIPMENT IS ONLY ACCESSIBLE WITH THE USE OF A TOOL.

WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOW TO BE FREE OF IGNITABLE CONCENTRATIONS.

WARNING - EXPLOSION HAZARD - SUBSTITUTION OF ANY COMPONENT MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.



For professional users in the European Union

If you wish to discard electrical and electronic equipment (EEE), please contact your dealer or supplier for further information.



WARNING – Cancer and reproductive harm – www.p65warnings.ca.gov

ADDITIONAL INFORMATION

The following resources contain additional information that can assist the user with the module installation and operation.

Resource	Link
Slate Installation	http://www.aparian.com/software/slate
XPosition User Manual XPosition Datasheet Example Code & UDTs	http://www.aparian.com/products/xposition
Ethernet wiring standard	www.cisco.com/c/en/us/td/docs/video/cds/cde/cde205_220_420/installation/guide/cde205_220_420_hig/Connectors.html
Trimble precision devices	http://www.trimble.com/tsg/precision-gnss.aspx
Slate Installation	http://www.aparian.com/software/slate

SUPPORT

Technical support will be provided via the Web (in the form of user manuals, FAQ, datasheets etc.) to assist with installation, operation, and diagnostics.

For additional support the user can use either of the following:

Contact Us web link	https://www.prosoft-technology.com/Services-Support/Customer-Support
Support email	support@prosoft-technology.com