

XM-60 wireless communication security protocol

The wireless communication within the XM-60 multi-axis calibrator uses the Laird 'TRBLU23' module. The data sheet is available at www.lairdtech.com/products/trblu23-00200

The module is a wireless device and typically has a transmission range of approximately 300 metres. However, this could be reduced or increased subject to the environment.

The wireless link in the XM-60 is only used for communication between the laser and the receiver. It is not used for external communication to the PC.

The only data transmitted from the receiver to the laser, is a data stream that includes details of the roll and straightness errors and signal strength.

The table below shows the command codes used in communications between the laser and the receiver, as well as the specific items of configuration data that can be read from the device by the software.

Command	Description
0x0100	Start data stream
0x0200	Stop data stream
0x0300	Set Gain A
0x0301	Set Gain B
0x0400	Get Gain A
0x0401	Get Gain B
0x0500	S/w trigger
0x0600	Set EEPROM
0x0700	Get EEPROM
0x0800	Set serial number
0x0900	Read version numbers
0xA00	Configure features
0xB00	Read features
0xC00	Configure extra features
0xD00	Read extra features

The data is then processed and passed to the PC via a USB cable. It is only after the data is received by the PC that it can be analysed to display the results of the machine's performance.

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Part no.: H-xxxx-xxxx-0x-x
Issued: 10.2016