Electrical and Cable Specifications

JoeScan Cables Guide

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Input Specifications

JS-25 scanners have two connectors: an LTW Industrial Sealed Ethernet and an iCONN 8-conductor circular sealed connector. The 8-conductor connector is used to supply power as well as encoder and synchronization signals to the scanner.

The encoder inputs are RS-422 5-V differential signals. They support encoder rates up to a maximum of 100,000 pulses per second.

The Start Scan input signal can be driven by either RS-422 5V differential, 5V push pull, or open collector outputs. For 5V push-pull and open collector operation, the input should be to the StartScan+ signals, and the StartScan- should be left floating. The Start Scan signal is edge triggered, and by default triggers on a falling edge. The `StartScanTriggerOnHigh` parameter reverses this, and causes the scanners to trigger on a rising edge.

8-Wire Pinout

JS-25 scanners are generally connected with our standard 8-wire cable. Alpha 2643C or an equivalent cable is suggested.

Table 1. Alpha 2643C / EN-3 / 8-Wire Diagram

Wire Color	EN-3 Pin	Function
White	1	Encoder B-
Green	2	Encoder B+
White/Black	3	Start Scan-
White/Red	4	Start Scan+
White/Yellow	5	Encoder A-
White/Green	6	Encoder A+
Black	7	Ground
Red	8	+24VDC