

# AS-i Protocol Overview

## Intellis 7700

AS-i is an easy to use, low-cost, network solution that has been designed specifically for use in low level automation systems. AS-i is a digital replacement for traditional parallel wiring that is easy to install, simple to configure, operate and maintain. AS-i technology is highly flexible in its topology and is compatible with many fieldbus or device networks. Low-cost gateways exist to use AS-i with Modbus, Modbus +, DeviceNet, PROFIBUS, Ethernet, Interbus, FIP, LON, RS-485, RS-422 and RS-232.



AS-International, the sponsor organization of AS-i, was formed in 1991 by a consortium of 11 European companies who developed the standard. Today, this association is open to any manufacturer or user of this technology and boasts a membership of nearly 100 companies worldwide, offering over 600 products and services.

The North American Chapter, the AS-i Trade Organization (ATO), was formed in April of 1996. The ATO changed the organization's name to AS-Interface USA in 2005. Through AS-Interface, members can submit AS-i products for conformance testing and certification.

Westlock Controls is a member of the AS-Interface USA and our AS-i products are conformance tested and certified.

<b>Physical Media</b>	Two wire cable (communications & power)
<b>Maximum Distance</b>	300 ft., 900 ft. with repeater
<b>Maximum Network Monitors per System</b>	62/network with 2.1 Master and slaves
<b>Maximum I/O Points per System</b>	434/network
<b>Current Consumption Per Network Monitor</b>	20 mA + 20 mA/coil (25 mA XP coil)
<b>Interface Capability</b>	All PLC's & DCS w/ AS-i Modbus, DeviceNet, Profibus Port
<b>Communications Method</b>	Master/slave with cyclic polling
<b>Error Checking</b>	Control sum, parity
<b>Network Topology</b>	Trunk & drop, zero drop, tree & star
<b>Transmission Speed</b>	167 kbps
<b>Redundancy</b>	No
<b>Valves Specific Diagnostics</b>	No