

# SmartComm™ Communications Module for Sigma Tool Changers

The SmartComm™ Communications Module for Sigma tool change systems features the fastest connection time on the market, utilizing many popular industrial buses

This is the only Communications Module to offer diagnostics and modularity, taking Communications information and indicators to a higher level



SmartComm™ Robot Side Communications Module

## Features and Benefits

- Supports many major industrial buses including, DeviceNet, Ethernet IP, Profibus, CC-Link, Profinet, etc.
- All SmartComm™ modules, regardless of bus chosen, support Ethernet communications for management and diagnostics.
- Module Diagnostics and webpage are incorporated on the Robot Side Module (Please see Engineering Data on reverse side of this sheet for more details on its features.)
- An isolated subnetwork drastically reduces connection times by a factor of 10.
- Tool Present and Ready-to-Couple Signal inputs communicate cycle time and tool changer status in half the time.
- Anti Tool Drop Circuit is incorporated into the Module design. The actuation valve will not operate unless a tool adaptor is not present or the tool is resting in its support stand (Please Note: A Portion of the Anti Tool Drop Circuit is not included with the Module but is available for purchase.)

### ARI Management Software (included at no additional charge)

#### Includes the Following Features:

- Test and operate the tool changer with no control system required
- User can view performance graphs, and download/export performance reports
- Troubleshoot network connections, and quickly identify problems with downstream customer devices. Increase uptime and production efficiency

## SPECIFICATIONS

Robot Module weight	0.85kg (1.87lb)
Tool Module weight	0.70kg (1.54lb)
Current/Electrical Contact	5 amps
Resistance/Electrical Contact	50 (mOhm)
Wire Gauge for Contact Receptacles	22 - 26 AWG
Module Dimensions	(LWH) 162mm x 110mm x 60.75mm
Connector Sizes	DeviceNet: Minifast
	Auxiliary Power: Minifast
	Ethernet: M12 D Coded
	Tool Stand: M12
	Valve: M12
Mounting to Tool Changer	Four M5 x 60mm length screws
IP Rating	IP65 (when coupled)

## Advanced Technology & Design

- Fastest available connection times
- Diagnostics available via a comprehensive we serve
- Ability to schedule maintenance and run, display and download system performance reports
- Specific diagnostics available for the tool changer itself

## Ethernet/IP Status Page Example Shown

Controller Network Status	
Server Protocol	EtherNet/IP
EtherNet/IP Adapter Status	
Network Status	Connected
Class 1 Rx API	99 ms
Class 1 Rx Packet Count	1103
Class 1 Tx API	100ms
Class 1 Tx Packet Count	1113
UCMM Request Count	7
DeviceNet Slave Status	
Network Status	Not Used
Expansion Server Status	
Network Protocol	Not Used
Network Status	Disconnected

Tool Network Status	
Client Protocol	DeviceNet
DeviceNet Master Status	
Network Status	Offline
Scanner Status	OK
Active Tool Node Count	0
Faulted Tool Node Count	0
Expansion Client Status	
Network Protocol	Not Used
Network Status	Disconnected

## Ethernet Diagnostics

Connect the SmartComm™ module to your network to view Diagnostic Information on a webpage, using ODVA standard M-12 D-coded 4 wire connector

- View IO Status
- View lifetime and current Cycle counts and performance data
- Set and read Maintenance counter functions
- View and download process timing information to track operation trends and anticipate maintenance needs
- View and download Cycle Time statistics to pinpoint problems
- Generate, download and export (using ARI's management software) XML format log history reports including such data as Time, Date, Module ID, Name, and Cycle Counts
- Set IP Address, Name, Description, and most other configurable parameters
- View Connected Device Status (the Connected Tool and its downstream blocks/slaves)

Not sure exactly what your application requires? Applied Robotics can design a solution that meets your particular application needs



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