MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

TRICONEX

MP 3009

MAIN PROCESSOR MODULE

Used with the applicable Triconex safety system configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Trident Planning Installation Guide

For a brief description of the modules, see the following tables.

Main Processor Module

Model	Description	Points
3101	14-maximum I/O modules, executes control application and votes on inputs and outputs	Not applicable

Communication Module

Model	Description	Points
3201	Interfaces, Modbus master or slave, selectable RS-232/485 serial ports, TriStation, Triconex Peer-to-Peer, TSAA, and TCP-IP/UDP-IP	Not applicable

Analog Input Module

Model	Description	Points
3351	4–20 mA, commoned, 6% over-range	32

Analog Output Module

Model	Description	Points
3481	4–20 mA, commoned, 6% over-range	4
3482	2 @ 4–20 mA, 2 @ 4–40 mA, commoned, 6% over-range	4

Digital Input Module

Model	Description	Points
3301	24 V DC, commoned	32

Digital Output Module

Model	Description	Points
3401	24 V DC, commoned	16

Pulse Input Module

Model	Description	Points
3381	0.5 Hz to 32 kHz, differential	6

Solid-State Relay Output Module

Model	Description	Points
3451	Non-triplicated, commoned in groups of 2	32

I/O Extender Modules

Model	Description
2281	I/O Extender Module Kit (without termination)
2291	I/O Extender Module Kit for I/O Baseplate (with termination)
2292	I/O Extender Module Kit for MP Baseplate (with termination)

Configuration

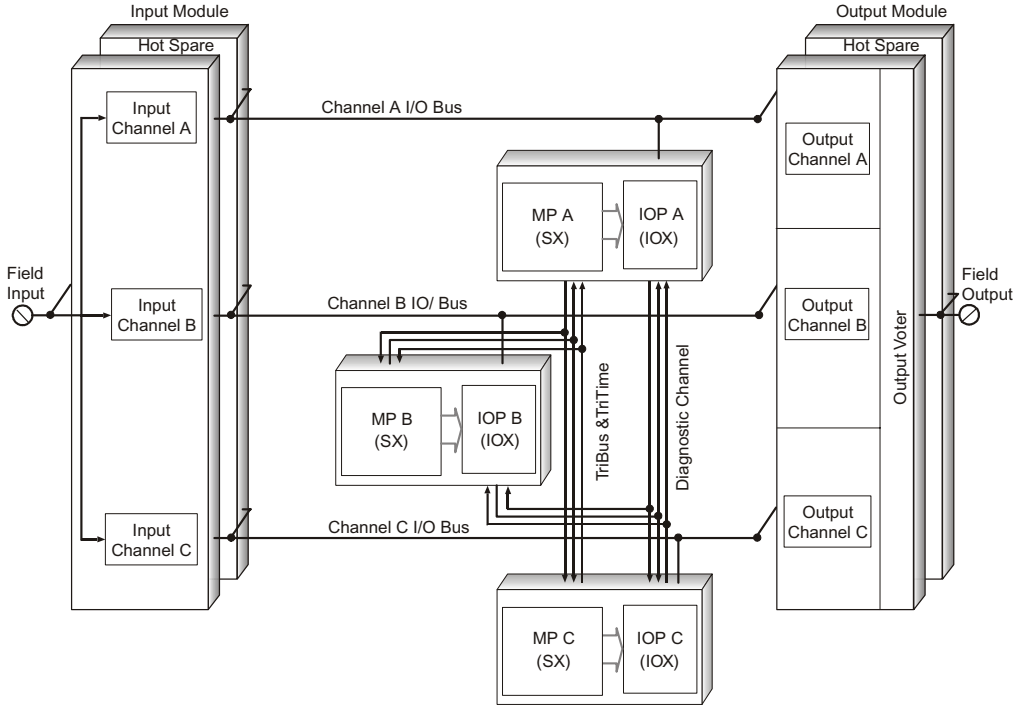
An assembly consists of a module and a baseplate. Three types of assemblies are available:

- Main Processor
- Communication
- I/O

A basic Trident system consists of one MP assembly, an optional CM assembly, and up to 14 I/O assemblies. If AO or PI Modules are included, up to 10 I/O assemblies are allowed.

Assemblies are configured into a system on a mounting plate using interconnect assemblies, extenders, I/O bus cables, and I/O bus terminators. I/O modules communicate with the MPs by means of a triplicated, RS-485, bi-directional communication bus, called the I/O bus.

Typical System Configuration



The I/O bus cable can be used to join I/O columns. Maximum cable length is up to 6 meters (20 feet) without termination or up to 200 meters (650 feet) with termination.