MAXIFLEX Remote I/O Conet Link Module

Model M1593A Remote I/O Conet Link Network Interface Module

DATASHEET

FEATURES

- **Expand I/O to Maxiflex Systems to 1000 I/O**
- **Connect Remote I/O to Maxiflex CPU's up to 10km away**
- **Implement Dual Redundant Control Systems**
- **Connect up to 3 additional Remote Slave I/O Bases**

The M1593A Remote I/O Conet Link (RIOc) Module allows up to three Maxiflex remote I/O Bases to be connected to a Maxiflex Master Base using Conet. The Remote I/O Bases can be located in the same panel, or up to 10km away.

The M1593A RIOc module fits into any I/O slot of a Maxiflex Master Base, and connects to up to 3 Maxiflex M1249A R3c Remote I/O Processors using Conet. Each Remote I/O Processor can scan up to 15 I/O modules.

This Maxiflex RIOc Module is designed to operate in conjunction with a Maxiflex T3 or P3 Maxiflex CPU module in the Master System. The RIOc module scans the I/O from the remote bases and transfers the I/O data into the T3 or P3 CPU's Data Interchange Table for program or SCADA access.

The data link to the Maxiflex R3c modules operates on the Conet data highway, providing an event-driven token-passing ruggedised industrial network capable of running up to 10km.

This allows remote I/O Bases to be placed in the same panel as the Master Controller, or distributed across the site.

APPLICATIONS

- **Create Maxiflex Systems larger than 15 I/O modules using remote I/O Processors. Up to three additional Maxiflex Bases can be integrated as Remote I/O into a Master Maxiflex System allowing systems up to 2000 I/O to be created.**
- **Construct dual redundant CPU applications with shared I/O. By combining this Maxiflex RIOc module with the Maxiflex P3-R or T3-R redundant CPU's, dual redundant CPU configurations can be constructed with shared I/O.**

http://www.omniflex.com

Specifications

Conet Communications Port	
Type	Conet Network Interface
Baud Rate	62,500 baud (Normal) or 7,800 baud (Slow)
Maximum cable length	Up to 10km depending upon cable type and baud rate.
Cable Type	Can operate over most conventional cables (twisted or not), but optimum distance of 10km is achieved with RS485 grade twisted pair cable.
Connection	9 pin sub-miniature DB9 (male).
Isolation to Logic	Tested to 1500Vac
I/O Capacity	
Number of Remote Bases	3 maximum
Number of I/O modules	14 maximum on the local Base 15 maximum per remote Base (x3)
Total number of I/O modules	59 modules maximum per CPU
Memory	
Data Interchange Table	3000 16 bit Registers
Front Panel Indicators	
OK (Green)	On = Healthy Flashing or Off = Module faulty
Token (Green)	Flashing = Token is being successfully passed.
Tx (Red)	On = data is being transmitted
Rx (Amber)	On = Data is being received
Environmental	
Operating Temperature	-25°C to +50°C (-13°F to +140°F)
Storage Temperature	-40°C to +70°C (-40°F to +158°F)
Humidity	95% max. at 40°C (104°F) non-condensing.
Protection	Electronics conformal coated
Logic Power Consumption	
From Logic Power Supply	250mA from 5Vdc max.
Mass	
Excluding Packaging	390g (13.8oz)
Including Packaging	480g (16.9oz)

Ordering Information

Description	Order Code
Maxiflex RIOc Remote I/O Conet Link Module.	M1593A

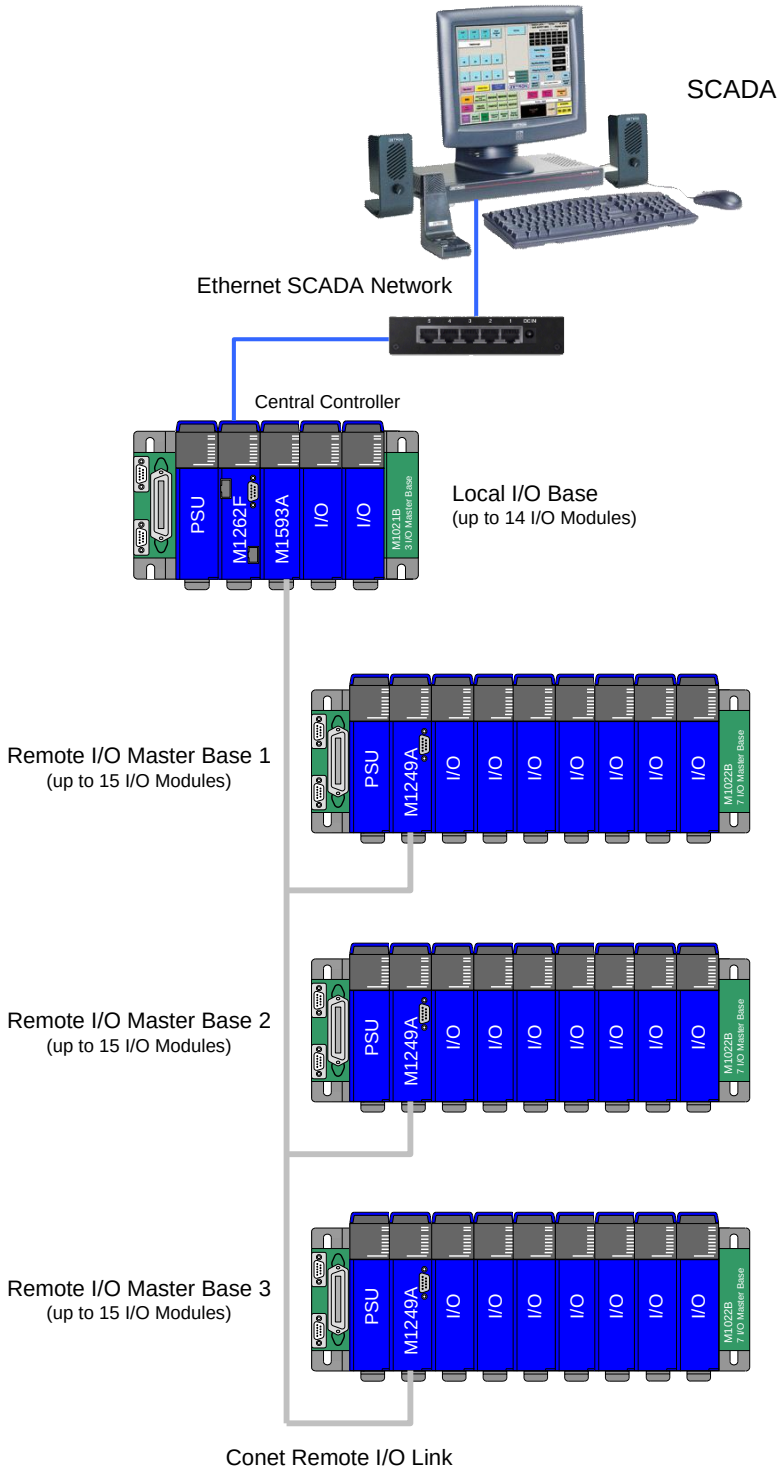
Conet Port Connection Details

Pin number	*Description*
2	Signal +
5	Cable screen (S)
8	Signal -
1, 3, 4, 6, 7 and 9	No connection

Pin allocation of Conet port connector on the Maxiflex M1593A RIOc Module

The M1593A Conet RIOc Link Module should be connected to the Remote I/O network using a M1832A Conet patch cable and either the C6171 Conet Marshalling Board for connections within the same panel, or the C6169 Conet Termination Board for longer distance connections.

Typical Remote I/O Configuration



Typical Redundant System Configuration