

INDUSTRIAL AUTOMATION PRODUCT

4210

Primary Single-Mode Fiber Remote Extender Module

Triconex 4210 is the primary single-mode fiber Remote Extender Module used in a 4210-3 set. It extends the triplicated I/O bus to remote Tricon chassis locations.

IDENTITY	VERIFIED VALUE
Manufacturer	Triconex
System family	Tricon remote I/O extension
Part number	4210
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



2

Technical Specifications

Technical values below are limited to the named Triconex product record.

PARAMETER	TECHNICAL VALUE
Official set designation	4210-3
Chassis location	Primary
Cable type	Single-mode fiber
Communication rate	375 kbit/s
Cable length limit	7.5 mi (12 km)
Remote sites supported	3
Connectors per remote site	6
Modem ports	Fiber optic with ST connectors
Set quantity	3 identical modules
Indicators	PASS; FAIL; ACTIVE; TX; RX1; RX2; RX3

ENGINEERING DATA SUMMARY

DATA GROUP	VERIFIED ASSIGNMENT
Installed host / carrier	three-module 4210-3 primary set
Companion hardware	matching remote single-mode RXM set
Field connection	ST-connector single-mode fiber pairs
Primary system function	Extends the triplicated Tricon I/O bus from the primary chassis to remote sites
Controlled acceptance duty	Remote shutdown I/O building connection

3

System Role and Architecture

Triconex 4210 is the primary single-mode fiber Remote Extender Module used in a 4210-3 set. It extends the triplicated I/O bus to remote Tricon chassis locations.

FUNCTION 1

Extends the triplicated Tricon I/O bus from the primary chassis to remote sites

FUNCTION 2

Repeats three isolated channels through single-mode fiber-optic links

FUNCTION 3

Supports three remote locations from one primary RXM set

FUNCTION 4

Provides ground-loop isolation and high immunity to electrical interference

Matched system components

- three-module 4210-3 primary set
- matching remote single-mode RXM set
- ST-connector single-mode fiber pairs
- remote Tricon I/O chassis

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	three-module 4210-3 primary set
Companion hardware	matching remote single-mode RXM set
Field connection	ST-connector single-mode fiber pairs
Primary system function	Extends the triplicated Tricon I/O bus from the primary chassis to remote sites
Controlled acceptance duty	Remote shutdown I/O building connection

4

Applications and Engineering Context

Remote shutdown I/O building connection

Extends the triplicated Tricon I/O bus from the primary chassis to remote sites

Long-distance process-unit I/O extension

Repeats three isolated channels through single-mode fiber-optic links

Ground-isolated fiber link between cabinets

Supports three remote locations from one primary RXM set

High-EMI remote Tricon chassis integration

Provides ground-loop isolation and high immunity to electrical interference

TECHNICAL NOTE

Treat 4210 as one channel of the three-module primary set, match every transmit/receive fiber to the corresponding remote channel, and verify RX1-RX3 plus TX diagnostics end to end.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	4210 / 4210 recorded
Physical interface	three-module 4210-3 primary set
Companion check	matching remote single-mode RXM set
Functional proof	Extends the triplicated Tricon I/O bus from the primary chassis to remote sites
Application test	Remote shutdown I/O building connection

5

Engineering Precautions

1

Verify 4210 and its channel position within the 4210-3 primary set.

2

Place the remote I/O path and dependent safety functions in the approved maintenance state.

3

Label every transmit and receive fiber before removing an ST connector.

4

Use single-mode fiber and preserve the engineered optical link budget and route.

5

Clean and inspect ST end faces with approved fiber practices.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
Triconex 4119A	Enhanced Intelligent Communication Module	Open product page
Triconex 4329	Network Communication Module	Open product page
Triconex 3008	Main Processor Module	Open product page

MANUFACTURER SOURCE RECORD

Tricon Systems Technical Product Guide

9791007-013

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com

