

INDUSTRIAL AUTOMATION PRODUCT

F860-CA

Unpopulated Eight-Segment Fieldbus IOTA

MTL F860-CA is an unpopulated eight-segment IOTA for the F860 redundant fieldbus power system. It links paired F801 or F802 power modules to Honeywell Series C Fieldbus Interface Modules and field segments.

IDENTITY	VERIFIED VALUE
Manufacturer	MTL Instruments Group
System family	F860 Redundant Fieldbus Power System
Part number	F860-CA
Country	USA
HS code	8537101190

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Technical Specifications

Technical values below are limited to the named MTL Instruments Group product record.

PARAMETER	VALUE
IOTA configuration	Unpopulated
Fieldbus segments	8
Power modules	F801; F802
Module positions	2
Input voltage	19.2 to 30.0 Vdc
Input current at 24 Vdc	3.5 A F801; 6 A F802
Power dissipation at 24 Vdc	20 W F801; 24 W F802
Segment output voltage	21.5 to 24.0 Vdc F801; 28.0 to 30.0 Vdc F802
Design current per segment	0 to 350 mA F801; 0 to 500 mA F802
Current limit	>370 mA F801; >520 mA F802
Minimum segment load	0 mA
Input isolation	250 Vac rms withstand
Segment isolation	200 Vdc withstand
Alarm contact rating	1 A maximum at 30 Vdc
Alarm contact state	Normally closed
Segment alarm threshold	<19 Vdc F801; <24 Vdc F802
Supply conductor	0.14 to 2.5 mm ²
FIM connection	Two 16-way multipin FCAB-0x cables
Segment termination	One automatic termination per segment
Ingress protection	IP20
Operating temp, full load	-40 to +65 degC F801; -40 to +50 degC F802
Operating temp, 60% load	-40 to +65 degC
Storage temperature	-40 to +85 degC
Physical networks	IEC 61158-2; FOUNDATION fieldbus H1; PROFIBUS PA
EMC compliance	EN 61326:1998
Mounting	Honeywell Series C I/O channel; vertical

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System Role and Architecture

MTL F860-CA is an unpopulated eight-segment IOTA for the F860 redundant fieldbus power system. It links paired F801 or F802 power modules to Honeywell Series C Fieldbus Interface Modules and field segments.

FUNCTION 1

Distributes conditioned power to eight independent fieldbus H1 segments

FUNCTION 2

Maintains segment termination with one or two installed F80x power modules

FUNCTION 3

Transfers individual segment-fault status to the Series C FIM IOTA

FUNCTION 4

Accepts an optional physical-layer diagnostics module for all eight segments

Matched system components

- Honeywell Series C 4-link FIM IOTA
- One or two F801 or F802 power modules
- Series C channel busbars or dual external 24 Vdc supplies
- Two FCAB-0x system cables and eight fieldbus H1 segments

INTERFACE AND ISOLATION RECORD

INTERFACE ITEM	DOCUMENTED VALUE
FIM-IOTA cables	Two 16-way FCAB-0x multipin system cables
External supply terminals	Pluggable rising cage clamp; 0.14-2.5 mm2
Fieldbus/input isolation	250 Vac rms withstand
Segment/segment isolation	200 Vdc withstand
Alarm contact	Normally closed; 1 A maximum at 30 Vdc
Segment termination	One automatic termination per segment

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Applications and Engineering Context

Redundant FOUNDATION fieldbus segment power

Distributes conditioned power to eight independent fieldbus H1 segments

Series C process-instrument networks

Maintains segment termination with one or two installed F80x power modules

High-availability eight-segment cabinets

Transfers individual segment-fault status to the Series C FIM IOTA

Fieldbus power and fault-diagnostic modernization

Accepts an optional physical-layer diagnostics module for all eight segments

TECHNICAL NOTE

Mount F860-CA vertically on the Series C channel, keep the two FCAB-0x links and eight segment identities unchanged, then prove power, alarm transfer and communication on every segment before restoring redundant service.

EIGHT-SEGMENT ACCEPTANCE EVIDENCE

CHECK	PASS CONDITION
Power-module pairing	F801 with F801 or F802 with F802 recorded
Supply path	Series C busbars or dual external 24 Vdc feeds verified
FIM link identity	Both FCAB-0x cables retained at their assigned connectors
Segment state	Eight green segment indicators confirmed under normal load
Alarm transfer	Shorted-segment or power-loss alarm reaches the FIM IOTA
Communication	Each H1 segment communicates before redundant release

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Engineering Precautions

1

Verify the complete F860-CA marking and its assigned F860 Redundant Fieldbus Power System position before work.

2

Isolate the energy associated with Honeywell Series C 4-link FIM IOTA before disconnecting F860-CA.

3

Protect the F860-CA connectors and electronic assembly using approved ESD controls.

4

Record the as-found One or two F801 or F802 power modules connections and configured assignment before replacement.

5

Confirm Series C channel busbars or dual external 24 Vdc supplies matches the approved installation record for F860-CA.

6

Restore F860-CA under controlled conditions and review its model-specific diagnostics.

7

Complete a documented functional test for redundant foundation fieldbus segment power before release.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
DC-TFB412	Redundant Series C FIM IOTA	Open product page
CC-MCAR01	Experion Series C carrier assembly	Open product page
8C-TDIL01	Series 8 digital-input SOE IOTA	Open product page
MC-IOLX02	TPS standard remote I/O link extender	Open product page

MANUFACTURER SOURCE RECORD

MTL F860 Redundant Fieldbus Power System Datasheet

F860 rev 6

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