

# TechNotes

## CABLE INTERFACE MODULES

WTN521GEF

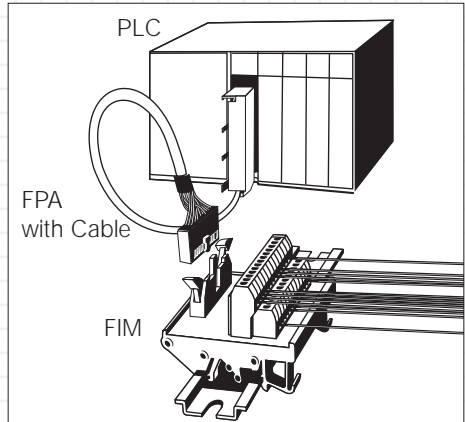
### GE Fanuc PLC Cable Interface

#### Modules

PLC Cable and Field Interface Modules

are used to reduce installation costs associated with field wiring and PLC control systems.

- Faster Installation
- Pretested components and assemblies
- Reduced cabinet space
- Easy troubleshooting
- Simplified installation with less wiring



#### Cable Specifications

Cable Lengths	1.0 m (39.37"), 2.0 m (78.74")
<b>RU</b> Type and Style	E-62291-T, AWM, Style 2464, GRAY
Insulation Voltage Rating	300 V
Operating Temperature	80°C (176°F)
Conductor Size	#22 AWG Multi-Strand
Conductor Current	3.0 Amps
Cable Current	3.0 Amps/Circuit, 12 Amp max per cable

The PLC Cable Interface System is composed of two components. The prewired PLC Front Panel Adapter (FPA) with cable and the Field Interface Module (FIM). The two components are designed to work with specific PLC manufacturers' I/O cards. Specifications for all of the FPA cables and Field Interface Modules (FIM) are listed by type and style.

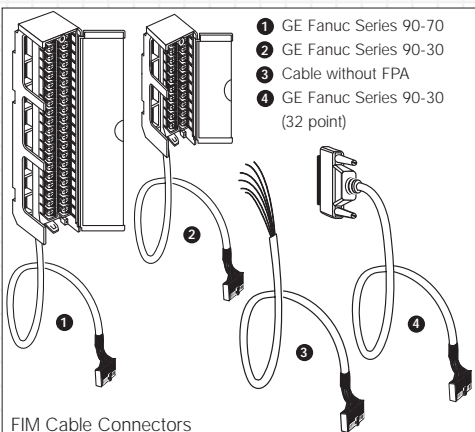
#### Field Interface Module (FIM) Specifications

Ratings



FIM Operating Voltage <sup>1</sup>	Refer to chart for specific FIM module and PLC I/O card
Maximum Current per Circuit	3 A
Maximum Current per Common	3 A
Indicator Current <sup>2</sup>	<2.0 mA
Terminal Block Wire Size	#26-12 AWG
Wire Strip Length	7 mm (.29")
Screw Tightening Torque	3.5 - 4.5 lb-in (0.38-0.50 Nm)
Operating Temperature	0°C to +60°C
DIN Rail Mount	TS 32 (□) or TS 35 (□)
Recommended Fuses <sup>3</sup>	GMT 2.0 Amp or 5x20mm 2.0 Amp

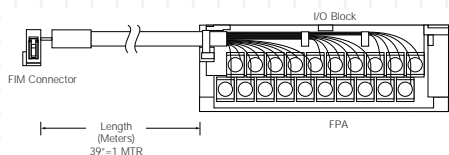
1 Do not exceed the normal operating voltage and current ratings specified in the application chart for the particular FIM and PLC I/O card.  
 2 Indicator LED current is a typical rating for LED circuits. Not all FIM are equipped with indicators.  
 3 Replacement fuses are available from Weidmüller. Do not replace fuses with fuse ratings higher than specified. Fuses are not included with module.



#### Front Panel Adapter (FPA) and Cable Assembly

The I/O wiring terminal, FPA, is an OEM component. Installation and assembly are exactly as specified by the PLC manufacturer. Simply remove the I/O wiring terminal and install the pre-wired FPA with cable. Dress the I/O cable toward the field wiring termination position in the panel or cabinet. The cable is terminated with a double row cable connector which is keyed to match the Field Interface Module. Cable assemblies with open ended lead wires are available for where it is preferable to wire in the field.

Cable Lengths are specified in standard lengths and are measured from FPA to FIM connector.



**Weidmüller**

The Interface Partner

1-800-849-9343

## GE Fanuc Series 90-30 Interface Modules and Cables

PLC I/O Card				Cable Assembly Format			
I/O Port Channels	I/O Port Type	I/O Model Number	I/O Type	Front Panel Adapter with Pre-Wired Cable		FIM Cable w/24 Pin Fujitsu Connector*	
				1 Meter	2 Meter	1 Meter	2 Meter
8	DI	IC693MDL634	SNK/SRC	998005	998007		
	DO	IC693MDL730	SRC	998019	998021		
				996570	996571		
		IC693MDL731	SNK	998023	998025		
		IC693MDL732	SRC	998192	998194		
		IC693MDL733	SNK	998027	998029		
12	DO	IC693MDL310	120 VAC	998057	998059		
16	DI	IC693MDL240	120 VAC	998043	998045		
				919725	919730		
				919732	919737		
		IC693MDL241	24 VAC/DC	998047	998049		
				915803	915808		
				915803	915808		
				915803	915808		
		IC693MDL645	4 VDC Pos/Neg Logic	998047	998049		
				998047	998049		
		IC693MDL646	4 VDC Pos/Neg Logic	998047	998049		
	998047			998049			
	DO	IC693MDL340	120 VAC	998061	998063		
				915817	915822		
		IC693MDL740	24 VDC Pos Logic	998066	998068		
919746				919751			
IC693MDL741		24 VDC Neg Logic	998071	998073			
			919753	919758			
IC693MDL742		24 VDC Pos Logic	998066	998068			
			919746	919751			
IC693MDL940	Relay Out	998076	998078				
32	DI	IC693MDL654	5/12 VDC Pos/Neg Logic			996726	996728
		IC693MDL655	24 VDC Pos/Neg Logic			996726	996728
	DO	IC693MDL752	5/24 VDC Neg Logic			998149	998151
		IC693MDL753	12/24 VDC Pos Logic			996730	996732

## GE Fanuc Series 90-70 Interface Modules and Cables

PLC I/O Card				Cable Assembly Format	
I/O Port Channels	I/O Port Type	I/O Model Number	I/O Type	Front Panel Adapter with Pre-Wired Cable	
				1 Meter	2 Meter
8	AI	IC697ALG230	Multi Voltage or Current Ranges	998176	998178
14	DI	IC697MDL671	24 VDC	998129	998131
16	DI	IC697MDL240	120 VAC Isolated	998186	998188
		IC697MDL251	120 VAC	998129	998131
		IC697MDL640	125 VDC Pos/Neg Logic	998129	998131
	DO	IC697MDL340	120 VAC	998134	998136
IC697MDL740		24/48 VDC, Source	998144	998146	
IC697MDL940		24-120 VAC/DC	998181	998183	
32	DI	IC697MDL250	120 VAC	998112	998114
		IC697MDL252	12 VAC	998112	998114
		IC697MDL253	24 VAC	998112	998114
		IC697MDL254	48 VAC	998112	998114
		IC697MDL650	24 VDC, Pos Logic	998112	998114
		IC697MDL652	12 VDC, Pos/Neg Logic	998112	998114
		IC697MDL653	24 VDC, Pos/Neg Logic	998112	998114
		IC697MDL654	48 VDC, Pos/Neg Logic	998112	998114
	DO	IC697MDL350	120 VAC	998117	998119
		IC697MDL750	24/48 VDC, Source	998124	998126
IC697MDL752		12 VDC, Source	998124	998126	
IC697MDL753		5/48 VDC Neg Logic	998091	998093	

\*Other cable lengths are available. Cables with the connector for the FIM and open-ended lead wires are available.

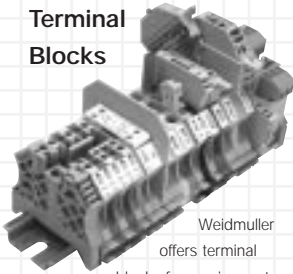
Field Interface Modules(FIM)						
FIM Line Status	FIM Housing Dimension L/H/W in mm	FIM Operation Voltage	FIM Signal Line Protection	FIM Type Passive		
				Disconnect	2 Wire	3 Wire
No	75x59x70	125VDC	None		998010	
No	75x59x70	12-24VDC	None		998014	
No	81x63x109	12-24VDC	5x20 Fuse & MOV		996569	
No	75x59x70	12-24VDC	None		998015	
No	75x59x70	12-24VDC	None		998014	
No	75x59x70	12-24VDC	None		998015	
No	90x56x70	120 VAC	None		998055	
No	90x56x70	120 VAC	None		998040	
No	105x75x87	120 VAC	Disconnect	919767		
No	96x89x70	120 VAC	Circuit Breaker			919765
No	90x56x70	24 VAC/DC	None		998041	
No	105x75x87	24 VDC	Disconnect	919767		
No	105x75x87	24 VDC	Disconnect	919766		
No	105x75x87	24 VAC	Disconnect	919767		
No	96x89x70	24 VAC	Circuit Breaker			919765
No	90x56x70	24 VDC	None		998041	
No	90x56x70	24 VDC	None		998041	
No	90x56x70	120 VAC	None		998189	
No	117x76x109	120 VAC	5x20 Fuse		919764	
Yes	117x76x109	120 VAC	5x20 Fuse		919763	
No	155x89x109	120 VAC	Circuit Breaker GMT Fuse			919762
No	90x56x70	24 VDC	None		998064	
Yes	117x76x109	24 VDC	5x20 Fuse		919761	
No	117x76x109	24 VDC	5x20 Fuse		919764	
Yes	123x61x109	24 VDC	5x20 Fuse & MOV		998001	
No	123x61x109	24 VDC	5x20 Fuse & MOV		996572	
No	90x56x70	24 VDC	None		998069	
Yes	117x76x109	24 VDC	5x20 Fuse		919760	
No	117x76x109	24 VDC	5x20 Fuse		919759	
No	90x56x70	24 VDC	None		998064	
Yes	117x76x109	24 VDC	5x20 Fuse		919761	
No	117x76x109	24 VDC	5x20 Fuse		919764	
No	113x59x70	24-120 VAC/DC	None		998074	
No	194x55x70	24 VDC	None		996723	
No	194x55x70	24 VDC	None		996723	
No	194x55x70	24 VDC	None		998147	
No	194x55x70	24 VDC	None		996723	

Field Interface Modules(FIM)						
FIM Line Status	FIM Housing Dimension L/H/W in mm	FIM Operation Voltage	FIM Signal Line Protection	FIM Type Passive		
				Disconnect	2 Wire	3 Wire
No	85x73x70	Multi V/A	None			998174
No	90x56x70	24 VDC	None		998137	
Yes	180x59x70	120 VAC	None		998184	
No	90x56x70	120 VAC	None		998127	
No	90x56x70	125 VDC	None		998137	
No	90x56x70	120 VAC	None		998132	
No	90x56x70	24/48 VDC	None		998142	
Yes	193x59x107	24-120 VAC/DC	5X20 Fuse		998179	
No	194x55x70	120 VAC	None		998110	
No	194x55x70	12 VAC	None		998110	
No	194x55x70	24 VAC	None		998110	
No	194x55x70	48 VAC	None		998110	
No	194x55x70	24 VDC	None		998120	
No	194x55x70	12 VDC	None		998121	
No	194x55x70	24 VDC	None		998121	
No	194x55x70	48 VDC	None		998121	
No	194x55x70	120 VAC	None		998115	
No	194x55x70	24/48 VDC	None		998122	
No	194x55x70	12 VC	None		998122	
No	194x55x70	5/48 VDC	None		998089	

# Weidmuller Products

## 1 DIN-Rail

### Terminal Blocks



Weidmuller offers terminal blocks for use in most wiring applications. Terminal blocks are available with both screw clamp and tension clamp connection systems for TS 32 and TS 35 DIN-rail.

#### Screw Clamp Terminal Blocks for TS 35 Rail

- Single and Multi-Level Feedthrough
- Circuit Protection: Fuse (standard and with blown fuse indication) Circuit Breakers (Single/ Double Pole)
- Disconnect (lever, slide link, plug)
- Ground
- Pluggable

#### Screw Clamp Terminal Blocks for TS 32 Rail

- Single and Multi-Level Feedthrough
- Circuit Protection: Fuse (standard and with blown fuse indication) Circuit Breakers (Single/Double Pole)
- Disconnect (lever, slide link, pull-pin)
- Ground

#### Tension Clamp Terminal Blocks for TS 35 Rail

- Single and Multi-Level Feedthrough
- Fuse (standard and with blown fuse indication)
- Disconnect (lever, plug)
- Ground
- Pluggable

#### Assembly and Installation Accessories:

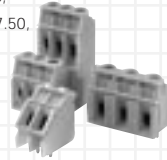
- Pre-Assembled Terminal Block Modules
- DIN-Rail: TS 35, 32 and 15
- Cable Markers
- Tools: Screwdrivers, Wire Strippers, Crimpers, Cutters
- Terminal Marking System

## 2 Printed Circuit Board Products

Weidmuller offers a range of products to connect discrete wiring to printed circuit boards (PCBs), both in fixed terminals and two-piece connectors.

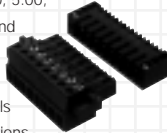
### PCB Terminal Blocks

- Pitch of 3.50, 5.00, 5.08, 7.50, 7.62, and 10.16 mm
- Single, Double and Triple Levels
- Orientations of 90°, 135°(45°), and 180°



### PCB Connectors

- Pitch of 3.50, 5.00, 5.08, 7.50, and 7.62 mm
- Single and Double Levels
- Plug orientations of 90°, 135°(45°), 180°, and 270°
- Header orientations of 90°, 135°(45°), and 180°



## 3 Interface Modules

Weidmuller has developed a complete range of interface modules that add functionality to DIN-rail assembly.



### Cable Interface Modules

- PLC Interface: Allen-Bradley, GE Fanuc, Siemens, Modicon
- Standard Connector Transition Modules
- Custom Modules

### Signal Interface Modules

- Relays and Optocouplers
- Signal Conditioners and Converters: Analog and Digital
- Surge Protection
- Power Supplies: Linear and Switchmode, AC/DC, DC/DC
- Custom Modules



## 4 Hazardous Area Products

Weidmuller offers enclosures in a variety of materials for protection of your assemblies and equipment. We also offer DIN-rail mounted intrinsic safety products for use in hazardous areas.

### Increased Safety Enclosures

- Enclosures: Stainless Steel, Steel, Aluminum and Polyester
- Fully Assembled Ex'e' Enclosures

### Intrinsically Safe Interfaces

- Zener Barriers
- Galvanic Isolators



## 5 Heavy Duty Connectors

Weidmuller offers a broad range of highly durable, heavy duty connectors for a variety of industrial applications.

- Basic Connectors
- Through Panel Connectors
- Modular Connectors



**Weidmüller** 

The Interface Partner

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