

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

TRICONEX

7400072-001

HIWAY INTERFACE MODULE

Used with the applicable Triconex safety system configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Tricon Technical Product Guide

Hiway Interface Module

The Model 4509 Hiway Interface Module (HIM) acts as an interface between a Tricon controller and a Honeywell TDC-3000 control system by means of the Hiway Gateway and Local Control Network (LCN). The HIM can also interface with Honeywell's older TDC 2000 control system by means of the Data Hiway.

The HIM enables higher-order devices on the LCN or Data Hiway, such as computers and operator workstations,

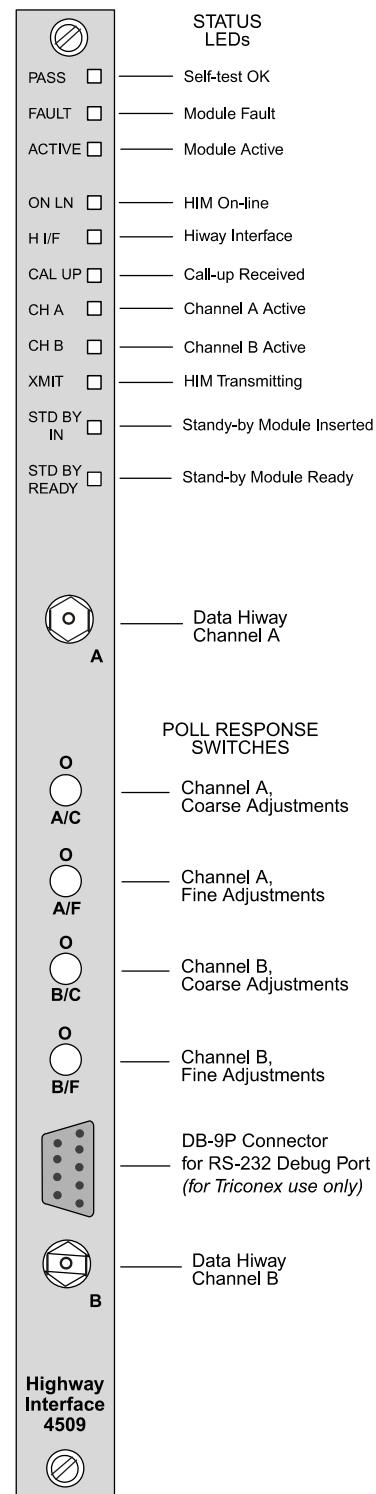
to communicate with the Tricon controller.

The HIM allows redundant BNC connections directly to the Data Hiway and has the same functional capacity as four extended Data Hiway Port (DHP) addresses.

The HIM provides eight Hiway addresses, implements the same slot structure as the DHP, and typically refreshes all data in less than 0.5 seconds. The hot-spare capability allows online replacement of a faulty module.

HIM Specifications

Model Number	4509
Data Hiway channels	2 isolated (AC coupled)
Poll response switches	2 per channel
Baud rate	250 kilobits per second
Status indicators	PASS (Module Status) FAULT (Module Status) ACTIVE (Module Status) ON LN (HIM Online) H I/F (Hiway Interface) CAL UP (Call-up Received) CH A (Channel A Active) CH B (Channel B Active) XMIT (HIM Transmitting) STD BY IN (Standby Module Inserted) STD BY READY (Standby Module Ready)
Power Module load	< 10 watts
Isolation	500 VDC



Module number in the first column with termination options on the right. An I/O module can be wired to a maximum of two termination
be of two different types—for example, commoned and non-commoned.

description	Commoned Term Panels	Non-Common. Term Panels	Basic Term Panels	Nonincendive Term Panels	RG 1.180 Term Panels	Fanned-out Cables	Bypass Panels	ERT Loop- Back Cables/Panels
/VDC, 32 pts.	9561-810F	9561-110F	9551-110F	n/a	n/a	9101-010F	n/a	9141-010F
VDC, 32 pts.	9562-810F	n/a	9552-610F	n/a	n/a	9101-010F	n/a	9142-010F
VDC, 32 pts.	9563-810F 9563-910F	n/a	9553-610F	9572-610F	n/a	9101-010F	BP9228-010F	9143-010F
XC, 64 pts.	9566-810F, 24V 9565-810F, 48V	n/a	9750-310F, 24V 9750-410F, 48V	9570-610F, 24V n/a	n/a	n/a	BP9229-010F n/a	n/a
low threshold,	9563-810F 9563-910F	n/a	9553-610F	9572-610F	n/a	9101-010F	BP9228-010F	9143-010F
0 Hz, 8 pts.	n/a	n/a	9753-110F	n/a	n/a	n/a	n/a	n/a
0 Hz, 8 pts.	n/a	n/a	9753-110F	9793-110F	9794-110F	n/a	n/a	n/a
π, 24 VDC,	n/a	n/a	9753-110F	9572-610F	n/a	n/a	n/a	n/a
single, 64 pts.	9566-710F	n/a	9553-610F	9571-610F	n/a	9101-010F	n/a	n/a
7, 16 pts.	9661-610F 9663-610F	9661-110F 9664-110F	9651-110F	n/a	n/a	9101-010F	n/a	9670-110F 9670-610F
7, 16 pts.	9663-610F	9664-110F	n/a	n/a	n/a	n/a	n/a	n/a
C, 16 pts.	n/a	9251-210	n/a	n/a	n/a	n/a	n/a	n/a
C, 16 pts.	9661-910F ^a 9664-810F ^a	n/a	9651-110F	n/a	n/a	9101-010F	n/a	9673-810F ^a
C, 16 pts.	9664-810F ^a	n/a	n/a	n/a	n/a	n/a	n/a	9673-810F ^a
7, 16 pts.	9662-810F	9662-110F	9653-610F	9671-610F	n/a	9101-010F	n/a	9671-810F
7, 16 pts.	9667-810F	9667-110F	9652-610F	n/a	n/a	9101-010F	n/a	9672-810F
7, 8 pts.	9661-510F	n/a	n/a	n/a	n/a	n/a	n/a	n/a
C, 8 pts.	9661-810F	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7, 8 pts.	9662-910F	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7, low power,	9662-710F	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7, 8 pts.	9667-910F	n/a	n/a	n/a	n/a	n/a	n/a	n/a
C, 16 pts.	9661-910F	n/a	9651-110F	n/a	n/a	9101-010F	n/a	n/a
C, 16 pts.	9664-810F	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7, self-protected,	9662-610F	n/a	9653-610F	9671-610F	n/a	9101-010F	n/a	n/a
7, self-protected,	9662-610F	n/a	9653-610F	9671-610F	n/a	9101-010F	n/a	9671-810F ^b
ed), 32 pts.	n/a	9668-110F	9651-110F	n/a	n/a	9101-010F	n/a	n/a
VDC, self-protected,	9662-610F	n/a	9653-610F	9671-610F	n/a	9101-010F	n/a	9671-810F ^b

Part Number Cross-Reference

The table below identifies the external termination assembly (ETA) part number and the cable part number for each termination panel model number.

There are four cable types included in this table:

- **FT4:** Ninety-degree cables that meet FT4 flame test ratings. Add “F” at the end of the base model number to obtain the complete model number. For example, 9551-110F.
- **Z:** Zero-degree cables, designed to be used with G-Series Enclosures for Tricon systems that have front access. Add “F-Z” at the end of the base model number to obtain the complete model number. For example, 9551-110F-Z.
- **LSZH:** Low Smoke Zero Halogen ninety-degree cables. Add “J” at the end of the base model number to obtain the complete model number. For example, 9551-110J.
- **FT1:** Ninety-degree cables that were shipped with pre-FT4 ETP models. These models did not include a letter at the end of the base model number.

Part Number Cross-Reference—ETPs

Base Model #	ETA	FT4 Cable	Z Cable	LSZH Cable	FT1 Cable (Old)
9551-110	3000400-160	4000187-110	4000192-110	4000140-110	4000093-110
9552-610	3000400-260	4000187-210	4000192-210	4000140-210	4000093-210
9553-610	3000400-360	4000187-310	4000192-310	4000140-310	4000093-310
9561-110	3000560-110	4000187-110	4000192-110	4000140-110	4000093-110
9561-810	3000510-180	4000187-110	4000192-110	4000140-110	4000093-110
9562-810	3000510-280	4000187-210	4000192-210	4000140-210	4000093-210
9563-810	3000510-380	4000187-310	4000192-310	4000140-310	4000093-310
9563-910	3000510-390	4000187-310	4000192-310	4000140-310	4000093-310
9565-810	3000540-280	4000187-210	4000192-210	4000140-210	4000093-210
9566-710	3000530-380	4000187-310	4000192-310	4000140-310	4000093-310
9566-810	3000540-380	4000187-310	4000192-310	4000140-310	4000093-310
9570-610	3000768-370	4000195-310	4000199-310	n/a	4000165-310
9571-610	3000768-390	4000195-310	4000199-310	n/a	4000165-310
9572-610	3000771-380	4000195-310	4000199-310	n/a	4000165-310
9651-110	3000410-160	4000188-110	4000193-110	4000141-110	4000094-110
9652-610	3000410-260	4000188-210	4000193-210	4000141-210	4000094-210
9653-610	3000410-360	4000188-310	4000193-310	4000141-310	4000094-310
9661-110	3000570-110	4000188-110	4000193-110	4000141-110	4000094-110
9661-510	3000550-160	4000188-110	4000193-110	4000141-110	4000094-110