

# 51401642-150

## 51401642-150 High-Performance I/O Link Card

51401642-150 High-Performance I/O Link Card

### PRODUCT SNAPSHOT

**BRAND**  
Honeywell

**FAMILY**  
Honeywell High-Performance

**PART**  
51401642-150

**DOCUMENT STATUS**  
Controlled engineering copy

### APTER POWER

#### WHATSAPP / PHONE

+86 180 3023 5313

#### WEBSITE

[www.apterpower.com](http://www.apterpower.com)



# PRODUCT OVERVIEW

Honeywell 51401642-150 provides I/O Link communication between the HPM communications/control card and installed I/O processors in a documented Honeywell High-Performance Process Manager installation.

 Processor resource: Dedicated I/O Link processor

 Shared memory: SRAM interface to the communications/control card

 Link interface: I/O Link driver/receiver

 Power conversion: +24 VDC to +5 VDC for the HPM module set

| RELATED APTER POWER PAGES          |                                    |                                    |
|------------------------------------|------------------------------------|------------------------------------|
| 1 Honeywell 51401496-100           | 2 Honeywell 621-2200RC             | 3 Honeywell 8C-PAOH51 51454355-175 |
| 4 Honeywell 8C-TAIMA1 51307171-175 | 5 Honeywell 8C-TAOXA1 51307135-175 | 6 Honeywell 8C-TDILA1 51307141-175 |
| 7 Honeywell MC-PAOX03 51309152-175 | 8 Honeywell MC-TAIH12 51304337-150 | 9 Honeywell MC-TAOX12 51304335-175 |

## SYSTEM COMPONENTS

| DOCUMENTED COMPONENT | ROLE IN SYSTEM          |
|----------------------|-------------------------|
| Proximity probe      | Matched extension cable |
| Proximitor Sensor    | AISI 4140 target        |

### ENGINEERING CONTEXT

The component remains matched to its installed host, interface hardware and engineering configuration. Commissioning restores that architecture and verifies the intended function under controlled conditions.

# TECHNICAL DATA

| PARAMETER          | VALUE                            |
|--------------------|----------------------------------|
| Product type       | High-Performance I/O Link card   |
| Part number        | 51401642-150                     |
| System             | High-Performance Process Manager |
| Processor resource | Dedicated I/O Link processor     |

| PARAMETER        | VALUE                                             |
|------------------|---------------------------------------------------|
| Shared memory    | SRAM interface to the communications/control card |
| Link interface   | I/O Link driver/receiver                          |
| Power conversion | +24 VDC to +5 VDC for the HPM module set          |
| Companion card   | High-Performance communications/control card      |

## RELATED PRODUCT PAGES

1 Honeywell 51401496-100

2 Honeywell 621-2200RC

3 Honeywell 8C-PAOH51 51454355-175

4 Honeywell 8C-TAIMA1 51307171-175

5 Honeywell 8C-TAOXA1 51307135-175

6 Honeywell 8C-TDILA1 51307141-175

7 Honeywell MC-PAOX03 51309152-175

8 Honeywell MC-TAIH12 51304337-150

9 Honeywell MC-TAOX12 51304335-175

## TECHNICAL NOTE

Install 51401642-150 only in its documented Honeywell High-Performance Process Manager position. Preserve the exact interfaces, wiring and configuration, then verify diagnostics and I/O Link communication between the HPM communications/control card and installed I/O processors under controlled conditions.

# APPLICATIONS & PRECAUTIONS

## COMMON APPLICATIONS

### 51401642-150 High-Performance I/O Link Card

Provides I/O Link communication between the HPM communications/control card and installed I/O

### Installed-system maintenance

Preserves the documented slot, termination, wiring and configuration during replacement.

### Controlled commissioning

Restores power and signals in the approved sequence and reviews diagnostics.

### Acceptance verification

Confirms the intended channel, network or safety function before release.

## PRODUCT PRECAUTIONS

1

Confirm the complete 51401642-150 identity on the hardware and maintenance record.

2

Place the affected Honeywell High-Performance Process Manager process in the approved

3

Record the installed position, connectors, terminals, wiring and configuration before removal.

4

Isolate all documented power and field energy and apply ESD controls where required.

5

Inspect the replacement identity, revision, interfaces and mating hardware before installation.

6

Restore every conductor, cable, power path and configuration value to the approved record.

7

Review host, module, channel or network diagnostics after controlled energization.

8

Perform a controlled test that proves I/O Link communication between the HPM

## RELATED APTER POWER PAGES

1

Honeywell 51401496-100

2

Honeywell 621-2200RC

3

Honeywell 8C-PAOH51 51454355-175

4

Honeywell 8C-TAIMA1 51307171-175

5

Honeywell 8C-TAOXA1 51307135-175

6

Honeywell 8C-TDILA1 51307141-175

7

Honeywell MC-PAOX03 51309152-175

8

Honeywell MC-TAIH12 51304337-150

9

Honeywell MC-TAOX12 51304335-175

# ENGINEER FAQ

## Q1 What is the main job of 51401642-150?

It is the HPM card that manages communication over the I/O Link.

## Q2 Which controller family uses 51401642-150?

It belongs to the Honeywell High-Performance Process Manager.

## Q3 How does 51401642-150 exchange data with the communications/control card?

It uses shared SRAM between the two HPMM cards.

## Q4 Which line interface is built into 51401642-150?

The card includes the I/O Link driver and receiver circuitry.

## Q5 What local power conversion is performed by 51401642-150?

It converts +24 VDC to +5 VDC for the HPM module set.

## Q6 Which companion hardware must be checked with 51401642-150?

Confirm the matched communications/control card, UCN interface, card file and I/O Link cabling.

## Q7 What should be recorded before exchanging 51401642-150?

Capture hardware revision, slot, indicators, link status and the installed HPM configuration.

## Q8 What proves 51401642-150 is operating after replacement?

Confirm power indication, healthy I/O Link diagnostics and controlled data exchange with every required IOP path.

## RELATED APTER POWER PAGES

1 Honeywell 51401496-100

2 Honeywell 621-2200RC

3 Honeywell 8C-PAOH51 51454355-175

4 Honeywell 8C-TAIMA1 51307171-175

5 Honeywell 8C-TAOXA1 51307135-175

6 Honeywell 8C-TDILA1 51307141-175

7 Honeywell MC-PAOX03 51309152-175

8 Honeywell MC-TAIH12 51304337-150

9 Honeywell MC-TAOX12 51304335-175

**SOURCE** Honeywell HPM High-Performance Process Manager Service | Honeywell manufacturer publication

+86 180 3023 5313 | sales13@apterpower.com | www.apterpower.com