

# IC660BBA024

## 24/48 VDC Current-Source Analog I/O Block

GE IC660BBA024 is the documented 24/48 VDC Current-Source Analog I/O Block for the Genius I/O.

| IDENTITY      | VERIFIED VALUE                                                             |
|---------------|----------------------------------------------------------------------------|
| Manufacturer  | General Electric                                                           |
| System family | Genius I/O                                                                 |
| Part number   | IC660BBA024                                                                |
| Product role  | Provides the documented 24/48 vdc current-source analog i/o block function |
| Lifecycle     | Installed product record                                                   |

### DOCUMENT SCOPE

Exact-article identity, technical data, host role, installation checks, applications, precautions and engineering verification.

### MODEL-SPECIFIC ENGINEERING NOTE

Install IC660BBA024 only in the documented Genius I/O position. Preserve the as-found terminal mapping and configuration, then verify diagnostics and the affected field function under controlled conditions.

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IC660BBA024

# Technical Specifications

Technical values below are limited to the named General Electric product record and directly applicable manufacturer documentation.

| PARAMETER      | VALUE      | PARAMETER         | VALUE                                                   |
|----------------|------------|-------------------|---------------------------------------------------------|
| Analog inputs  | 4          | Supply range      | 18 to 56 V DC                                           |
| Analog outputs | 2          | Input diagnostics | Underrange, overrange, high alarm, low alarm, open wire |
| Signal type    | 4 to 20 mA | Status indicators | Unit OK; I/O Enabled                                    |
| Block power    | 24/48 V DC |                   |                                                         |

## Verified Product Record

| DATA GROUP                 | VERIFIED VALUE                                                                                                                                                                                                 |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Installed host / carrier   | Genius I/O                                                                                                                                                                                                     |
| Primary system role        | Provides the documented 24/48 vdc current-source analog i/o block function                                                                                                                                     |
| Connection boundary        | Install IC660BBA024 only in the documented Genius I/O position. Preserve the as-found terminal mapping and configuration, then verify diagnostics and the affected field function under controlled conditions. |
| Controlled acceptance duty | Genius I/O station maintenance                                                                                                                                                                                 |

### ENGINEERING BOUNDARY

Confirm IC660BBA024, host, terminals, power grouping, point map and controlled test results before release.

## Pre-Installation Checks

|   |                                                                                             |   |                                                                                             |
|---|---------------------------------------------------------------------------------------------|---|---------------------------------------------------------------------------------------------|
| 1 | Confirm the full IC660BBA024 catalog marking and installed Genius I/O position before work. | 2 | Isolate the station supply and connected field energy using the approved procedure.         |
| 3 | Record every terminal, common, shield, connector and configured point before removal.       | 4 | Use ESD controls and protect backplane, terminal and connector contacts from contamination. |

## Documented Service Record

| RECORD ITEM        | REQUIRED ENTRY                   |
|--------------------|----------------------------------|
| As-found article   | IC660BBA024                      |
| Installed host     | Genius I/O                       |
| Connection record  | Capture before removal           |
| Controlled release | Diagnostics and functional proof |

# System Role and Architecture

GE IC660BBA024 is the documented 24/48 VDC Current-Source Analog I/O Block for the Genius I/O.

**FUNCTION 1**  
Provides the documented 24/48 vdc current-source analog i/o block function

**FUNCTION 2**  
Uses exact catalog identity IC660BBA024 for replacement control

**FUNCTION 3**  
Integrates with the matched Genius I/O hardware

**FUNCTION 4**  
Supports controlled connection checks and functional verification

## Matched System Components

| NO. | DOCUMENTED COMPONENT / ROLE                                                                                                                                                                                    |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Genius I/O                                                                                                                                                                                                     |
| 2   | 2                                                                                                                                                                                                              |
| 3   | Genius I/O station maintenance                                                                                                                                                                                 |
| 4   | Install IC660BBA024 only in the documented Genius I/O position. Preserve the as-found terminal mapping and configuration, then verify diagnostics and the affected field function under controlled conditions. |

## System Integration Record

| INTEGRATION ITEM       | DOCUMENTED ROLE                                                                                                                                                                                                           |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host identity          | Genius I/O                                                                                                                                                                                                                |
| Interface role         | Provides the documented 24/48 vdc current-source analog i/o block function                                                                                                                                                |
| Field / power context  | The component is used with the exact terminal assembly, carrier, power grouping and bus configuration identified for IC660BBA024. Commissioning preserves the installed point map and verifies controlled field response. |
| Commissioning evidence | Complete a controlled signal or load test before returning the station to service.                                                                                                                                        |

## Installation and Connection Checks

**1** Verify each documented value for IC660BBA024 against the installed host and field circuit.

**2** Restore the approved terminal assembly, power grouping and configuration record.

**3** Energize in the prescribed sequence and review module, bus and point diagnostics.

**4** Complete a controlled signal or load test before returning the station to service.

### MANUFACTURER SOURCE RECORD

Genius I/O Discrete and Analog Blocks User's Manual  
GEK-90486D-2, September 1993

# Applications and Engineering Context

## Genius I/O station maintenance

Restores the documented 24/48 vdc current-source analog i/o block function in an engineered station.

## Distributed I/O refurbishment

Uses exact IC660BBA024 identity when rebuilding the recorded field interface.

## Control-panel modernization

Preserves the approved terminal, power and communications arrangement during migration work.

## Controlled recommissioning

Verifies point mapping, diagnostics and field response before process release.

### TECHNICAL NOTE

Install IC660BBA024 only in the documented Genius I/O position. Preserve the as-found terminal mapping and configuration, then verify diagnostics and the affected field function under controlled conditions.

## Model-Specific Acceptance Evidence

| CHECK              | ACCEPTANCE CONDITION                                                               |
|--------------------|------------------------------------------------------------------------------------|
| Identity           | IC660BBA024 recorded                                                               |
| Host / carrier     | Genius I/O                                                                         |
| Physical interface | Provides the documented 24/48 vdc current-source analog i/o block function         |
| Configuration      | Energize in the prescribed sequence and review module, bus and point diagnostics.  |
| Functional proof   | Complete a controlled signal or load test before returning the station to service. |

## IMPORTANT NOTICE

Confirm IC660BBA024, host, terminals, power grouping, point map and controlled test results before release.

## Controlled Release Summary

| RELEASE ITEM     | MODEL-SPECIFIC CONDITION                                                           |
|------------------|------------------------------------------------------------------------------------|
| Article identity | IC660BBA024                                                                        |
| Approved role    | Genius I/O station maintenance                                                     |
| Final validation | Complete a controlled signal or load test before returning the station to service. |

# Engineering Precautions

- 1

Confirm the full IC660BBA024 catalog marking and installed Genius I/O position before work.
- 2

Isolate the station supply and connected field energy using the approved procedure.
- 3

Record every terminal, common, shield, connector and configured point before removal.
- 4

Use ESD controls and protect backplane, terminal and connector contacts from contamination.
- 5

Verify each documented value for IC660BBA024 against the installed host and field circuit.
- 6

Restore the approved terminal assembly, power grouping and configuration record.
- 7

Energize in the prescribed sequence and review module, bus and point diagnostics.
- 8

Complete a controlled signal or load test before returning the station to service.

## Related Products on Apter Power

| MODEL          | SYSTEM ROLE  | APTER POWER PAGE                         |
|----------------|--------------|------------------------------------------|
| DS200QTBAG1ADC | product page | <a href="#">View DS200QTBAG1ADC page</a> |
| DS3800NGDC1B1A | product page | <a href="#">View DS3800NGDC1B1A page</a> |
| IS420UCSBH1A   | product page | <a href="#">View IS420UCSBH1A page</a>   |
| IC200CPUE05-JP | product page | <a href="#">View IC200CPUE05-JP page</a> |
| IC200UDR005-CH | product page | <a href="#">View IC200UDR005-CH page</a> |
| IS200WREAH1ABB | product page | <a href="#">View IS200WREAH1ABB page</a> |
| IS200EHPAG1DAB | product page | <a href="#">View IS200EHPAG1DAB page</a> |
| IS200EGDMH1AFG | product page | <a href="#">View IS200EGDMH1AFG page</a> |

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