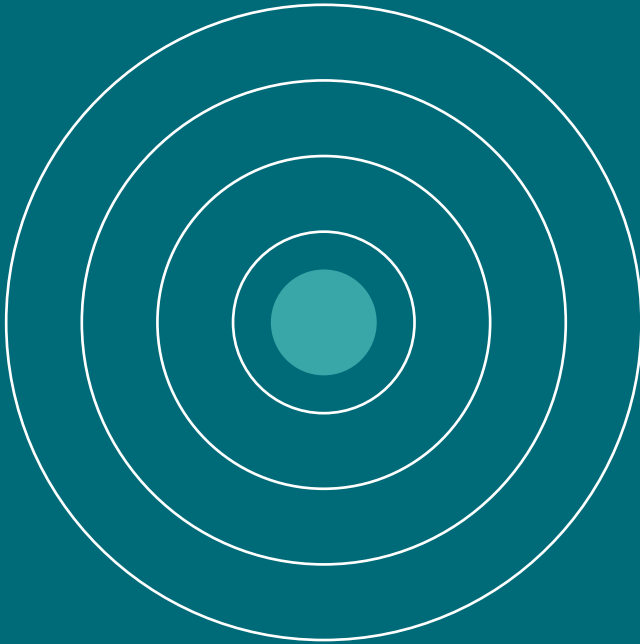


MANUFACTURER-SOURCE TECHNICAL REFERENCE

# TRICONEX 3625

## Product Reference

Tricon 32-Point TMR 24 V DC Digital Output Module



### DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited manufacturer sources. No product photograph is included.

|                           |                                                               |
|---------------------------|---------------------------------------------------------------|
| Product / lookup identity | TRICONEX 3625                                                 |
| Reference number          | 3625                                                          |
| Document basis            | Published product records, PDFs, and manuals listed on page 3 |



### Product page

<https://www.apterpower.com/Invensys/triconex-3625>  
**Apter Power contact**

[sales13@apterpower.com](mailto:sales13@apterpower.com) | +86 180 3023 5313

## Product role and published parameters

### WHAT IT IS, WHAT IT DOES, AND WHERE IT FITS

Triconex 3625 is a 24 V DC, 32-point Triple Modular Redundant supervised or non-supervised digital output module for Tricon safety and critical-control systems. It receives triplicated output commands over the Tricon I/O bus, votes the three command paths through fault-tolerant output switching, and sources commoned DC output signals to connected field loads. Each point can be configured for supervised operation so the module diagnostics can monitor field power, load presence, open circuits, short circuits and output-switch behavior while the process output remains available. The module is used with two compatible 16-point field termination panels or cables in Tricon version 10.2 and later systems for energize-to-trip or de-energize-to-trip circuits in process-safety and critical-control applications.

| Published field           | Manufacturer-published value or verified identity note |
|---------------------------|--------------------------------------------------------|
| Output type               | TMR supervised or non-supervised digital output        |
| Output signals            | 32, commoned                                           |
| Nominal field voltage     | 24 V DC                                                |
| Recommended voltage range | 16 to 32 V DC                                          |
| Maximum voltage           | 36 V DC                                                |
| Logic power               | Less than 13 W                                         |
| Maximum point current     | 1.70 A +/-10% per point                                |

### System function and signal path

|    |                                                                                                                                |
|----|--------------------------------------------------------------------------------------------------------------------------------|
| 01 | The application program issues a digital output command through the three Tricon processing paths.                             |
| 02 | The 3625 receives the triplicated commands over the I/O bus and votes them in its fault-tolerant output-switch circuitry.      |
| 03 | One voted 24 V DC output is sourced through the selected termination products to the field load.                               |
| 04 | Voltage and current loopback diagnostics check the output switch, field circuit and load according to the point configuration. |



## Applications, answers, and official sources

**1** Emergency shutdown outputs: Commands compatible shutdown relays, solenoids or isolation devices in a configured Tricon safety function.

**2** Fire and gas protective outputs: Provides supervised DC output circuits for compatible alarms, deluge interfaces or ventilation shutdown functions.

**3** Burner and combustion safeguards: Supports configured energize-to-trip or de-energize-to-trip output circuits for critical fuel and combustion equipment.

**4** Turbine and process protection: Drives compatible trip and interlock loads in high-availability process-safety systems.

## Frequently asked questions

|                                                    |                                                                                                                                                      |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>What is Triconex 3625?</b>                      | It is a 32-point, 24 V DC TMR supervised or non-supervised digital output module for compatible Tricon safety and critical-control systems.          |
| <b>Which Tricon versions support model 3625?</b>   | The official planning and installation guide states that model 3625 can be installed in Tricon version 10.2 and later systems.                       |
| <b>How many outputs does the module provide?</b>   | It provides 32 commoned digital output signals.                                                                                                      |
| <b>What field-voltage range is recommended?</b>    | The recommended range is 16 to 32 V DC, with 24 V DC nominal and 36 V DC maximum.                                                                    |
| <b>What does supervised operation monitor?</b>     | Configured supervision extends diagnostics to field power, the presence of a load, open or missing loads, short circuits and output-switch behavior. |
| <b>Can points be configured as non-supervised?</b> | Yes. Point supervision is programmable per point; configuration and thresholds must follow the TriStation and Tricon documentation.                  |