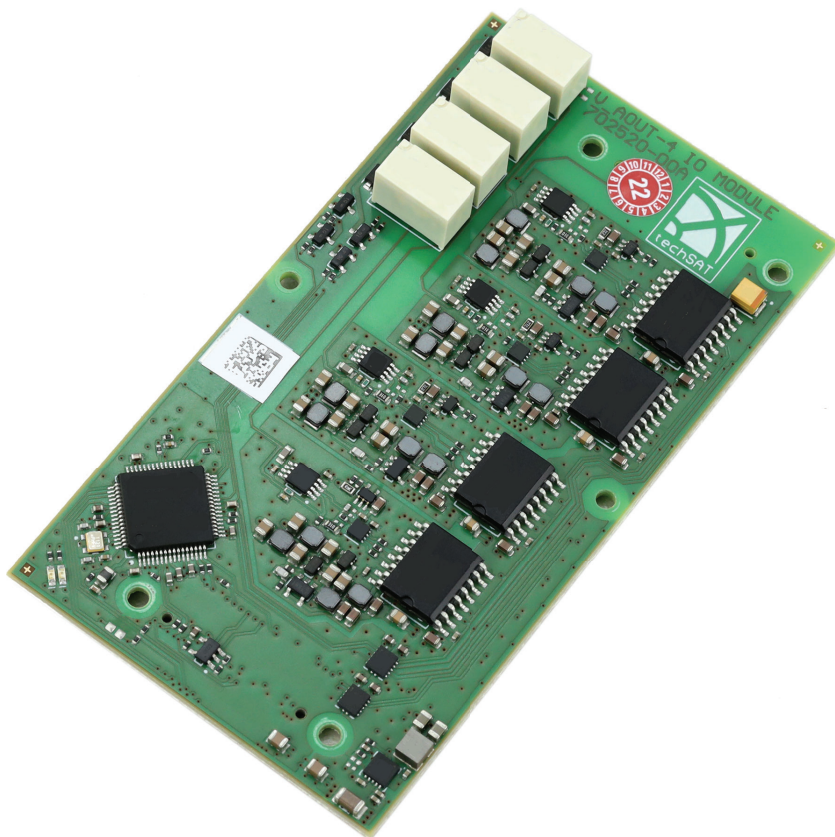


V-AOUT4

Analog Voltage Output Module



- Four digital-to-analog conversion channels
- All channels galvanically isolated, 16-bit resolution
- Local microcontroller supporting advanced functions
- Compatible with TechSAT PCIe-2G (PCI) and FAST-2G (Ethernet) carriers
- Fully integrated in TechSAT's Simulation and Test Environment ADS2™



V-AOUT4

Analog Voltage Output Module

Description

The V-AOUT4 module is a member of TechSAT's Modular IO (TSMIO-2G) product family, second generation. TSMIO-2G modules can be mounted either on a PCIe carrier (PCIe-2G Carrier) or on the Ethernet carrier (FAST-2G Carrier). All members of the TSMIO-2G family are fully integrated into the TechSAT ADS2 Simulation and Test Environment as well as provided as standalone products with a fully featured user API.

The V-AOUT4 module provides four individually configurable and galvanically isolated 16-bit analog output channels. The channels are individually configurable for 3 different ranges (see Technical Data) through the API.

The modules are factory calibrated. Gain, offset, and linearity correction parameters are stored on the module and applied during output generation by the on-module software.

Operation

The V-AOUT4 modules operate in direct mode, that means the output is set as fast as possible after a data write request.

Advanced Function

The on-module 32-bit microcontroller can be used to implement application-specific advanced functions like digital output filters, various wave form generation, PWM generation, etc.

Technical Data

Features

- Up to 4 galvanically isolated channels on a single board
- Software-based configuration per channel:
 - 3 individual voltage output ranges
- Accessible via FAST-2G or PCI-e2G protocol from ADS2 or standalone user API

Electrical Characteristics

- Reference voltage: 4.096 V
- Input range
 - Unipolar version

1	0 V to 2.5 V
2	0 V to 5 V
3	0 V to 10 V

- Bipolar version

1	-2.5 V to 2.5 V
2	-5 V to 5 V
3	-10 V to 10 V

- Accuracy: 0.05% full scale
- Maximum update rate: 20 kHz
- Power supply: provided by carrier

Physical Dimensions

- 95 mm x 52 mm

Environmental Conditions

- Operating temperature: 0 °C to +70 °C
- Storage temperature: -40 °C to +85 °C
- Humidity: 0 - 90% non-condensing

Part Number

- 702520-01 Unipolar version
- 702520-02 Bipolar version