

# SAKSHAM

## AI16 [S73016C00CV04G04GIND]

### 16 Channel Analog Input Module

The analog input module is a crucial component designed to facilitate the integration of analog signals into the PLC system. It receives analog signals from a diverse array of external devices, including sensors, transmitters, gauges, variable frequency drives (VFDs), thermocouples, and transducers. Through these inputs, we are able to optimally control and monitor vital processes within the plant environment. This product is an 16-channel analog input module, designed with galvanic isolation across four distinct groups, each comprising four channels.

- No. of Analog Inputs : 16 Channels
- Type of Analog Input : 0-20 mA
- Released Date : From July 22
- Mounting : Base Unit TBUS-PPPPPPPP
- Galvanic Isolation : Yes
- Galvanic Isolation Group : 4
- Channels In One Group : 4 Channel/Group
- Function Of Diagnostics : Available
- Insulation Tested With : 500 V DC
- Field Connection : 37-Pin D-Sub Female Connector
- Power Connection : 5 Pin Phoenix Plug-In Screw Connector (De-Coded)
- Cable Length Max : 500 m, 1.0 mm<sup>2</sup> shielded cable
- Dimension (W x H x D) : 25 x 122 x 115 mm
- Weight : 160 g approx



Hot Swappable



Fast and Easy Integration



IEC 61131-3

#### Mandatory Accessories

- TBUS
- Power TB

#### Accessories

- Analog Input FTA
- Prefab Cable



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### General Information

No. of Analog Inputs	: 16 channels
Type of Analog Input	: 0-20 mA
Released Date	: From July 22
Firmware Version	: 1.00.001
Firmware Update Possible	: Yes
Engineering Software	: CODESYS V3.5 SP19 & above
Mounting	: Base Unit TBUS-PPPPPPP

### Isolation

Galvanic Isolation	: Yes
Galvanic Isolation Groups	: 4 Groups
Channel In Groups	: 4 Channel/Groups

### Power Supply

Power Supply From	: Top Side De-Coded Plug-In Screw Terminal
Normal Supply Voltage	: 24 V DC
Low Supply Voltage	: 18.5 V DC
High Supply Voltage	: 28.5
Reverse Polarity Protection	: Yes
Input Current	: 0.4 A
Input Current Per Channel Permissible	: 21.5 mA
Transmitter Power	: Yes
Power Loss	: Less than 1 W

### Range

Input Range	: 0-20 mA
Input Range	: 4-20 mA
Input Range	: 0-10 V DC
Measuring Range	: Scalable
Input Resistance	: 120 Ω in mA selection

### Configuration In Running

Parameterization in Run	: Yes
Calibration in Run	: Yes

### Hardware Configuration

Automatic Encoding	: No
Mechanical Coding Element	: Yes

### Conversion Principle

Analog Input Measuring Principle	: Sigma Delta (Integrating)
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### Integration and Conversion Time per Channel

Resolution (with over-range)	: 12 Bit
Conversion Time Per Channel	: 100 ms

### Error

Linearity Error	: 0.1% (Input Range)
Operational Error	: 0.5% (Input Range)
Basic Error	: 0.3% (Input Range)

### Interference Voltage Separation

Series Mode Interference	: Min 70 dB
Common Mode-Voltage	: Max 10 V
Common Mode Interference	: 90 db

### Input Current

For "1" Signal	: Yes
For "1" Signal	: Yes

### Diagnostic

Function of Diagnostic	: Available
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### Diagnostic Messages

Wire-Break	: Yes (4-20 mA)
Short-Circuit	: Yes
Channel Diagnostics	: Yes

### LED

Power Indication	: Yes
Channel Status	: No
Module Fuse Blown	: Yes
Module Diagnostics (Back-Plane Comm)	: Yes

### Potential Separation

Separation Between Channel	: Yes (Groups Isolation)
Separation Between Backplane	: Yes
Separation Between Channel and System Power Supply	: Yes
Insulation Tested With	: 500 V DC

### Ambient Condition

Horizontal Installation	: 0°C
Horizontal Installation	: 60°C
Vertical Installation	: 0°C
Vertical Installation	: 60°C

### Connection

Field Connection	: 37-Pin D-Sub Female Connector
Power Connection	: 5 Pin Phoenix Plug-In Screw Connector (De-Coded)

### Other Information

Cable Length Max.	: 500 m, 1.0 mm <sup>2</sup> shielded cable
Address Space per Module	: 32 Bytes
Dimensions (W x H x D)	: 25 x 122 x 115 mm
Weight	: 160g Approx