# STI

## Vibration Monitoring and Machine Protection Systems

**1010 East Main Street, League City, TX 77573   Phone:281.334.0766   Fax: 281.334.4255**
**www.stiweb.com  /  www.stiwebstore.com**

**STI Vibration Monitoring Inc.**

*Condition Monitoring Custom Products*

# CMCP-ADC Series
# Analog to Digital Converters

**Features:**

- 14 Bit A/D for precision measurements
- Smart filtering rejects noise
- Redundant Outputs
- User choice of integration time - speed vs. filtering
- Field replaceable current shunts save maintenance time
- Ethernet and RS-485 Outputs Per Unit
- Available for Analog, Voltage, RTD's, Thermocouples and Relays

## Specifications: See Page 2 Additional Information

| | |
|---|---|
| Number of channels | 8 or 16 |
| A/D resolution | 14 bits (0.01%) |
| Full scale accuracy (@20°C) | +/- 0.05% |
| Span and offset temp. coefficient | +/- 50 ppm per °C typical |
| Input impedance | 100 Ohms |
| Fastest scan rate | (16 channels) 5 mS |
| Required supply voltage | 10-30 VDC (0.75 watt typical) |
| Operating temperature range | -30 to 70° C |
| Storage temperature range | -40 to 85° C |
| Humidity (non-condensing) | 5 to 95% |
| Protocol | SIXNET "I/O for Windows" and Modbus ASCII and RTU |
| Baud rate | 38,400 bps |
| Recommended distance | Up to 0.5 mile |
| Isolation (from Ethernet port) | 1200 Volts RMS 1 minute |

## Ordering Information:

| Part No. | Description |
|---|---|
| **CMCP-ADC-16AI** | 16 4-20mA Inputs |
| **CMCP-ADC-32AI** | 32 4-20mA Inputs |
| **CMCP-ADC-16VI** | 16 Voltage Inputs |
| **CMCP-ADC-32VI** | 32 Voltage Inputs |
| **CMCP-ADC-16TC** | 16 Thermocouple Inputs |
| **CMCP-ADC-16RTD** | 16 RTD Inputs |
| **CMCP-ADC-16RLY** | 16 Channel Relay Output |

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## CMCP-ADC Series
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### CMCP-ADC-16AI and CMCP-ADC-32AI Specifications:
Input range: 4-20mA
A/D resolution: 16 bits (0.003%); 10 bits (1mS fast option)
Input impedance (resistance): 100 ohms or 200 Kohms
Fuses: self-resetting short circuit protection
DMRR (differential mode): 66 db at 50/60 Hz
Update time: from 880 mS to 1 mS (depending configuration)
Temperature accuracy: typical un-calibrated +/-0.5°C

### CMCP-ADC-16VI and CMCP-ADC-32VISpecifications:
Input range: 0-10 VDC
A/D resolution: 16 bits (0.003%); 10 bits (1mS fast option)
Input impedance (resistance): 100 ohms or 200 Kohms
Fuses: self-resetting short circuit protection
DMRR (differential mode): 66 db at 50/60 Hz
Update time: from 880 mS to 1 mS (depending configuration)
Temperature accuracy: typical un-calibrated +/-0.5°C

### CMCP-ADC-16TC and CMCP-ADC-16RTD Specifications:
Input range: RTD and Thermocouple
A/D resolution: 16 bits (0.003%); 10 bits (1mS fast option)
Input impedance (resistance): 100 ohms or 200 Kohms
Fuses: self-resetting short circuit protection (4-20 mA inputs)
DMRR (differential mode): 66 db at 50/60 Hz
Update time: from 880 mS to 1 mS (depending configuration)
Temperature accuracy: typical uncalibrated +/-0.5°C
RTD type: 100 Ohm platinum
RTD alpha: 0.00385 or 0.00392
RTD connections: 2 or 3-wire
RTD input range: -200 to 850°C

### CMCP-ADC-16RLY Specifications:
Output voltage range: 10-30 VDC or 10-30VDC/AC
Maximum output power: up to 1A per channel
Short circuit protection: self-reset fuses (trip above 1.5 Amp)
Input isolation: 150 volts (16 channel modules only)
All channels scan rate: 1 mS

### CMCP-ADC Series Physical Specifications:
Mounting: DIN rail (EN50022), direct to panel or flat panel
Packaging: impact resistant Lexan® polycarbonate
Dimensions (module and base): 5.5″L x 3.5″W x 5.1″H (14cm x 8.9cm x 13cm)

### Certifications and Standards:
Electrical safety : UL 508, CSA C22.2/14; EN61010-1 (IEC1010); CE
EMI emissions: FCC part 15, ICES-003, Class A; EN55022; EN61326-1; CE
EMC immunity : EN61326-1 (EN61000-4-2,3,4,6); CE
Hazardous locations: Class 1, Div 2, Groups A, B, C, D; UL 1604; CSA C22.2/213; Cenelec EN50021 Zone 2
Marine and offshore: tested and/or verified to meet various standards such as DNV No. 2.4, Lloyds and ABS