ASHE CONTROLS PVT LTD
an ISO 9001:2015 certified company

# MAX-16X

## MAX-Series Temperature Scanners




## Overview

The ASHE MAX series Temperature Scanners are part of a range of fully configurable micro-controller based instruments with control outputs, offered in a highly compact, rugged and reliable execution. The instrument has six keys on the front panel, with which the operator can set the parameters and configure the instrument as desired. A two-digit display indicates the channel number, while a four-digit display indicates the corresponding temperature.

The instrument has non-volatile memory. The instrument accepts input from sixteen nos. RTD Pt-100 or Thermocouple sensors. The instrument is calibrated as specified.

The Temperature Scanner provides sixteen control Relay outputs configurable to any of the input channels, providing alarm or trip set-points for any channel. The set points are configured through the Membrane Keypad on the front panel. The instrument operates on universal AC power supply and is offered in standard panel-mount execution.

The instrument offers RS485 communication on MODBUS RTU. Further, two analog retransmission outputs are offered which may be configured to any of the inputs.

The temperature is factory calibrated to the desired operating range of the input sensor through the instrument software and may be changed, if specifically required. Other features include it's inherent accuracy and immunity to shocks, dust, ambient temperatures, and humidity.

Further, the instrument is manufactured using selected high-grade components which guarantee it's functionality and long operational life. The instrument carries a performance warranty against defects in design and workmanship.

This product is backed by a full two-year warranty, covering all manufacturing defects and workmanship issues under normal operating conditions.

## Specifications

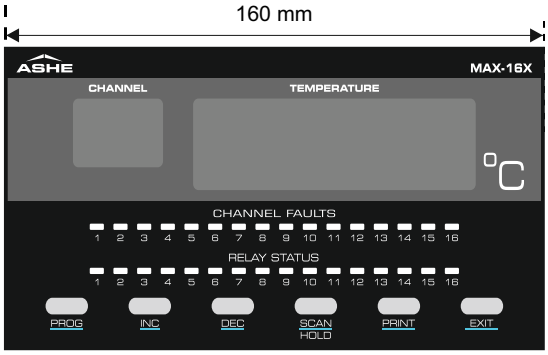
| | |
|---|---|
| **Model** | ASHE MAX-16X (Sixteen-channel, panel mount) |
| **Type** | Microcontroller based Multi-channel Temperature Scanner. |
| **Input Signals/Sensors** | RTD Pt-100, Thermocouples Type J,K. |
| **Display** | Seven-segment, red LED displays. |
| **Indications** | Four-digit display for Temperature.<br>Two-digit display for Channel number. |
| **LED Indications** | Yellow LEDs for Channel faults & Alarm<br>Red LEDs for Relay Status |
| **Scale Range** | -70.0 to 500°C (for RTD Pt-100)<br>0 to 750/1200°C (for Thermocouples Type J/K) |
| **Response Time** | Typically 100 mS. |
| **Outputs** | Sixteen control relay single changeover contacts configurable to selected channel. |
| **Contact Rating** | 10 Ampere @ 230 VAC (Resistive Loads). |
| **Retransmission** | 4 to 20 mA DC. |
| **Load Driving Capacity** | 600 Ohms |
| **Communication** | RS485 on Modbus RTU (optional). |
| **Memory** | Non-Volatile (on EEPROM). |
| **Settings** | By Touch key Membrane keypad |
| **Features** | Scale calibration, Alarm/Trip, Channel Faults, Channel Skip, Scan/Hold etc. |
| **Accuracy** | ± 0.2% FS. |
| **Power Supply** | 90 to 270 VAC, 50/60 Hz Universal AC Power Supply. |
| **Dimensions** | 160 x 80 x 150 mm [W x H x D]. |
| **Enclosure** | Panel mounting. |
| **Weight** | Approximately 1.0 kgs. |
| **Operating Temperature** | 0 to 55°C |

## Features

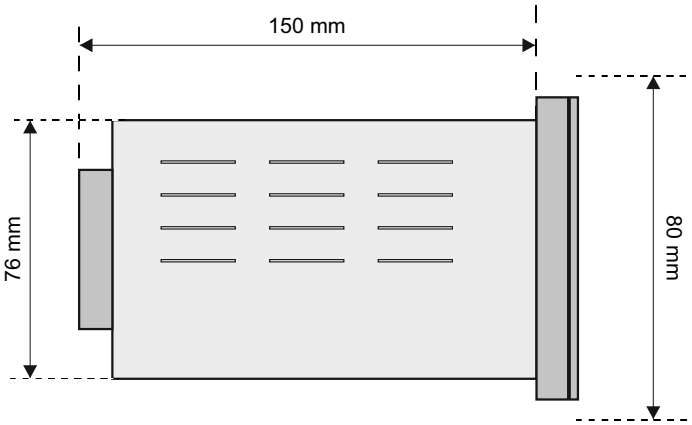
- Microcontroller based design
- Standard Temperature Sensors
- Various channel options : 2/4/8/16
- High accuracy and linearity to input signal
- Dual 2/4-digit seven-segment LED displays
- Sixteen Relay change-over contacts
- Very low power consumption and heat dissipation
- Fully configurable
- Two Analog Retransmissions option
- Universal AC Power Supply
- RS485 Modbus Communication option
- On-Off control action
- Rugged, industrial grade ABS enclosure
- High noise immunity
- Panel mount installation
- Two-year Performance Warranty
- Proven record of successful site installations

www.ashecontrols.com • Phone : (022) 2405 1561, 2405 5791, 2405 5543 • E-mail : sales@ashecontrols.com

## Dimensional Diagram




FRONT VIEW




SIDE VIEW

## How To Order

| | TEMPERATURE SCANNER | MAX | | | | | |
|---|---|---|---|---|---|---|---|
| | Configuration and add-on options | | | | | | |
| 1 | **CHANNEL OPTIONS** | | | | | | |
| ▸ | Four Channel | 4U | | | | | |
| ▸ | Eight Channel | 8U | | | | | |
| ▸ | Sixteen Channel | 16U | | | | | |
| ▸ | Sixteen Channel | 16X | | | | | |
| 2 | **POWER SUPPLY** | | | | | | |
| ▸ | AC Voltage 90 to 270 VAC, 50/60 Hz. | | A | | | | |
| ▸ | DC Voltage 24 V DC (±10%). | | D | | | | |
| 3 | **INPUT SIGNALS** | | | | | | |
| ▸ | Analog 4-20 mA DC | | | L | | | |
| ▸ | RTD Pt-100 (three-wire) | | | R | | | |
| ▸ | Thermocouple (type to be specified) | | | T | | | |
| 4 | **EXECUTION** | | | | | | |
| ▸ | Panel Mount execution | | | | P | | |
| ▸ | Field mounting in Weatherproof execution | | | | W | | |
| ▸ | Field mounting in Flameproof execution | | | | X | | |
| 5 | **COMMUNICATION** | | | | | | |
| ▸ | RS485 on Modbus RTU Required | | | | | M | |
| ▸ | Modbus RTU Not Required | | | | | N | |
| 6 | **RETRANSMISSION** | | | | | | |
| ▸ | Retransmission Required | | | | | | R |
| ▸ | Retransmission Not Required | | | | | | N |

## Our Other Products


FLOW TOTALIZER


SIGNAL ISOLATORS & TRANSDUCERS


TEMPERATURE SCANNER


FLAMEPROOF INSTRUMENTS


STATIC POWER SWITCHES

Designed and Manufactured by :
**ASHE CONTROLS PRIVATE LIMITED**
6/317, 318 & 319, Jogani Industrial Complex, Near ATI, Sion-Trombay Road, Chunabhatti (East), Mumbai - 400 022, India.
Phone : (022) 2405 1561, 2405 5791, 2405 5543 • E-mail : sales@ashecontrols.com • Website: http://www.ashecontrols.com