



UniScan UT-201

Micro-controller Based

16 – Channel Temperature Scanner

- for RTD Pt-100 (IEC-60751)
- Special feature : can be used for applications requiring control based on Average temperature

Standard Features:

- Universal Power Supply (85 to 270VAC/DC).
- Sealed membrane keyboard.
- Battery free NVRAM based operation.
- Fully user programmable.
- 8 built-in relays (optionally 32 open collector outputs)
- Easy Calibration
- Buzzer for key operation.
- All terminations are caged screw type.
- Optionally RS-485 communication capability can be provided

UniScan UT-201 is a state-of-the-art micro-controller based temperature scanner designed for accurate and reliable operation.

The scanner makes full use of its micro-controller, to offer wide variety of features and functions and at the same time making it extremely easy to use and operate.

It accepts Pt-100 RTD sensors for temperature monitoring.

As a normal temperature scanner, the user has a facility to program Alarm and trip set points for each individual channels. Relays can be assigned using "relay grouping" function for Alarm and trip signals of these channels.

If programmed to work on average temperature, two additional setpoints, "Avg. high on" and "Avg high off" can be set. Depending on Average temp and these set points, relay 7 is operated. Relay no 8 is dedicated to operate, if any channel goes faulty.

With "Mode" switch, the user can select the display to show continuously,

Data relating to the channel having highest temperature amongst all channels.

Average temperature of all channels.

Individual Channel temperature.

Technical Specifications

UniScan UT-201

General Specifications

No. of channels : 16
Scanning speed : 4 channels / sec
Sensor : Pt-100 (IEC 60751)
Temp. Range : 0-400 °C
Accuracy : 0.25% of FS ± 1 digit.
Resolution : 0.1 °C.
No. of keys : 8 (sealed membrane)
No. of Relays : 8 in-built
Relay out puts : One potential free C/O contact per relay
Display : 8 Seven-segment LEDs

LED Indications

16 LEDs for indicating channel status
8 LEDs for indicating relay status and
5 LEDs to indicate display mode.

Mechanical Specifications

Dimensions : 192H x 96W x 250D in mm.
Panel Cutout : 186H⁺² x 92W⁺¹ in mm.
Mounting : Flush \ Panel type
Fixing : By pair of C clamps, on panels with max. 5mm thickness
Enclosure : Sheet steel duly painted
Weight : 3.5 Kg. (approx) unpacked

Electrical Specifications

Supply Voltage : Universal SMPS
85-270VAC/DC or
Relay ratings : For res. load 5A/230VAC,
300mA at 220VDC
Terminal Type : Screw type Caged.
Suitable for 0.2 - 2.5mm² cables
Power consumption: max. 15 VA
Insulation : 100 Mohm or more with 500VDC applied between each terminal in turn and earth. Scanner will withstand 2KVrms, 50 Hz. for 1 min., applied between all relay & supply terminals shorted together and earth.
Computer comm : Provided against specific demand
Isolated (1 KVDC) RS-485 port with modbus slave RTU protocol

Environment

Temperature : -10 to 70 Deg C
Relative humidity: max 90% non condensing

Operator level functions

Show Alarm Set-points
Show Trip Set-points
Show Average High Set points
Change Display Speed
Indicate the Channels in Scan
Add / Delete Channels in Display
Show Channels in Error
Display Max. Actual Temp from All Channels

Supervisor level functions

Change Set-point for Alarm
Change Set-point for Trip
Change Average High Set points
Add / Delete Channels in Scan
Calibration of Channels
Default Factory Calibration