MCIH

PROGRAMMABLE INDICATORS

Cerebrum Series

Cuteind

FEATURES

- ✦ **Wide choice of Inputs.**
- ✦ **Configuration / Calibration thro keypad.**
- ✦ **5 Digit LED Display.**
- ✦ **Linearisation of T/C & RTD.**
- ✦ **Terminal embeded CJ Compensation.**
- ✦ **Sq.root / Linear indication of mA / V.**
- ✦ **Rangeable in Engineering units.**
- ✦ **Open sensor Indication/ alarm.**
- ✦ **Two potential free contacts.**
- ✦ **Optional Retransmission output.**



About *Cuteind* .....

Cuteind Programmable Indicators from MCIH offer low cost solutions for process monitoring with diversified input requirements. Cuteind is basically a microcontroller based receiver indicator with transmitter powering and two alarm contacts. But the full front panel programmability of the instrument does all the magic. Selection of input type, display ranging in engineering units, setting of Alarm parameters and even selection of retransmission output are all keypad configurable through the front panel. No switch settings, No jumper selection and No screw driver adjustments. Hence the operational reliability of `Cuteind' is at its best.

Cuteind is offered in four different models to give cost effective and optimised solutions covering the requirement of all.

Cuteind-S accepts voltage and milliampere signals to give Linear or Square root indication.

Cuteind-U has universal input feature, accepting Thermocouple 10 types, RTD (Pt-100,500,1000), mV, Ohms, mA and Voltage. It has sensor linearisation for T/C & RTD inputsand Sq.Root / Linear selection for mA / V signals.

Cuteind can optionally give an isolated mA / V Retransmission output.

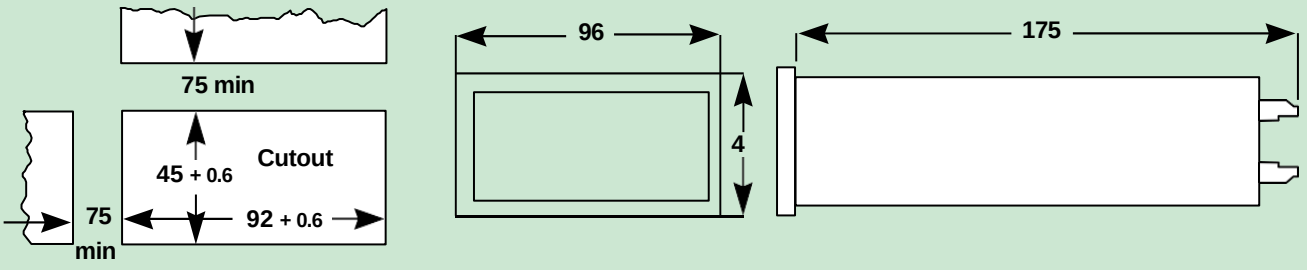
GENERAL SPECIFICATIONS

Power Supply : 90 to 270V AC/ 50 to 60 Hz(12W)
Operating Temp : 0 to 55 °C.
Storage Temp : 0 to 70 °C.

Humidity : 0-90% (Non Condensing).
Mounting : Flush panel.
Bezel : 48 H X 96 W mm
Fascia Protection : IP65

DIMENSIONS : In mm and not to scale

Noryl enclosure



Doc Number :**CI adv0524**

PERFORMANCE SPECIFICATIONS

INPUT

Types and Accuracy

Cuteind - S

Input	Standard Ranges	Accuracy
mA 1	4-20 mA	±0.05% FS
mA 2	0-20 mA	±0.05% FS
V 1	1-5 V	±0.05% FS
V2	0-10 V	±0.05% FS
Input	**User Defined Ranges[1]**	**Accuracy**
V	-10 to 10 V [2]	±0.05% FS

Cuteind - U

Input [3]	Range	Accuracy	
		Below 0°C	Above 0°C
T/C-J,E	-200 to 700 °C	±2°C	±0.5°C
T/C-K,	-200 to 1200 °C	±2°C	±0.5°C
T/C-N	-200 to 1300 °C	±2°C	±1.0°C
T/C-T	-200 to 400 °C	±2°C	±0.5°C
T/C-R,S,B	0 to 1700 °C		±2.0°C
T/C-C,D	0 to 2300 °C		±2.0°C
Pt100,500, 1000	-200 to 850 °C	±1.0°C	±0.5°C
mV [1]	-75 to +75 mV [2]	±0.05% FS	
Ohms 1 [1]	0 to 500 Λ [2]	±0.05% FS	
Ohms 2 [1]	0 to 5000 Λ [2]	±0.05% FS	
mA[4] / V	Same as Cuteind -S	Same as Cuteind -S	

I/P Impedence : 51Λ for mA, 1MΛ for V ,10MΛ for mV
Extn Current : 200µA for Ohms.
Filter : Programmable Digital Filter.
Tx. Powering : 24V DC, 30mA. Short circuit protected.
CJC Error : ±0.5°C max (Terminal embedded sensor)

DISPLAY

Type : Seven Segment LED, 14.2mm.
Range : -19999 to 99999 with 4 decimal points.
Resolution : 0.1°C below 1000°C, 1°C above 1000°C.

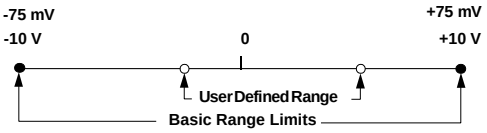
ALARMS

Types : Hi/Lo programmable through keypad.
Setpoints & Hysteresis : Cuteind -S - in % or engg units
Cuteind -U - in % or °C or engg units through keypad.
Output : Two Change over relay contacts 250 V AC/ 30V DC, 5 Amp (Non-inductive)

RETRANSMISSION (optional)

Output : 0-20mA / 4-20mA / 0-5 V/ 1-5V / 0-10V Selectable through front panel Keypad.
Accuracy : 0.05% of FS (D/A accuracy only).
Load : 650Λ (max) for mA. 1KΛ (min) for V.

Note 1: User can define any range confined within the Basic range limits indicated.



Note 2: Indicated values are Basic range limits.

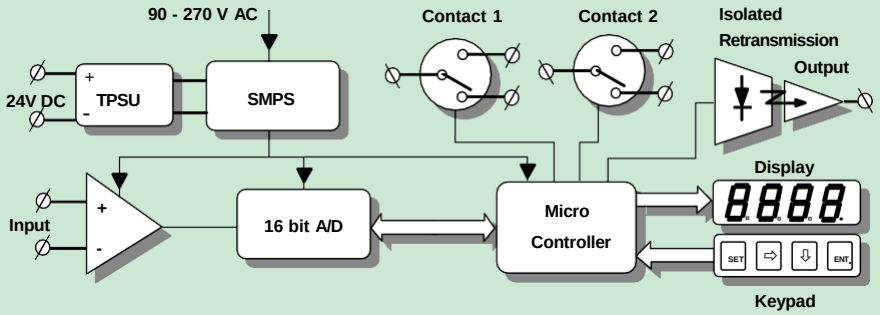
Note 3: All T/Cs as per NIST Monograph 125. Built in Cold Junction Compensation is provided. Pt 100/500 as per DIN 43760. T/C & RTD inputs are linearized. Range of temperature indicated refers to the working temperature range of respective thermocouple.

Note 4: In Cuteind - U bipolar ranges are not supported in mA input. Basic range limits for mA range is 0-20mA.

For Thermocouple and RTD input types not listed in the table, please contact Factory.

Dual channel universal input indicator with math functions is also available. Contact factory for more details on Model SmartInd.

FUNCTIONAL SCHEMATIC



ORDERING INFORMATION

Input	Retransmission	Model
mA, Voltage	Not Provided	Cuteind - **S N**
mA, Voltage	Provided	Cuteind - **S T**
T/C, RTD, mV, Ohms, mA, V	Not Provided	Cuteind - **U N**
T/C, RTD, mV, Ohms, mA, V	Provided	Cuteind - **U T**

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Specifications aresubject tochange without anynoticeduetocontinuous development.