



	A	K	L	M	N	O
3	Date Time	Temperature PV	Temperature AL1	Temperature AL2	Pressure PV	Pressure AL1
4	06-06-2019 10:00	25.3	-	-	79.9	-
5	06-06-2019 10:15	25.5	-	Y	79.9	-
6	06-06-2019 10:30	25.2	-	-	80	-
7	06-06-2019 10:45	25.2	-	-	80	-
8	06-06-2019 11:00	25.1	-	-	80	-
9	06-06-2019 11:15	25	-	-	80.1	-
10	06-06-2019 11:30	24.9	-	-	80	-
11	06-06-2019 11:45	25	-	-	80	-
12	06-06-2019 12:00	24.6	Y	-	79.9	-

The **UniRec - CZ** is designed to Monitor & Record Process Values, Alarm Status & Errors / Faults from any Modbus RTU (Serial) Communicable devices like Process Indicators / Controllers, Sensors / Transmitters, Analog Modules, Electric / Energy Meters, HMIs, PLCs, etc. Up to 25 Devices / Process Value Channels can be connected to **UniRec - CZ** using 2-wire communication cable.

The UniRec - CZ incorporates huge internal Flash memory for storing about 38 lakhs (38,56,000) records which can be conveniently carried to the PC on Pen-Drive. The Records can be viewed on MS Excel Sheet. All the Excel features then can be used for a variety of Data Processing tasks like Report Generation, Graph Plotting, Numeric Analysis, etc.

The UniRec - CZ facilitates Monitoring & Recording Multiple channels from the same device. The term **Channel** comprises Process Value (PV) + 2 Alarms + PV Faults.

An Easy-to-Use & User Friendly FREE PC Software Tool allows quick configuration of UniRec - CZ for desired numbers of channels / devices.

Each Channel can be configured for Process Value, Alarms & Faults using the following tabs.

Channel / Process Value / Alarms

Channel

- 16 Character Channel Name. The channel names are used to uniquely identify different channels on UniRec - CZ Front Display & Excel Sheet Records.
- Device ID (Modbus Slave).

Process Value

- Data Types : 16-Bit Signed, 16-Bit Unsigned, 32-Bit Signed, 32-Bit Unsigned & 32-Bit Single Precision Float
- Programmable Byte Sequence for 32-Bit Data Type.
- Modbus Register Address (0 to 65535).
- Process Value Resolution (Decimal Point). Use one of the following two options for setting the resolution.
 - Linear Scaling ($Y = mX + c$). The received PV Data Value (X) is scaled by applying the user set slope (m) and y - intercept (c) values. The result (Y) is then displayed & recorded with the user set Precision Value (0 = 1 count, 1 = 0.1 count, 2 = 0.01 count, 3 = 0.001 count & 4 = 0.0001 count).
 - PV Resolution Modbus Register. This option is not available for 32-Bit Single Precision Float data type. The device must supply the decimal point position via a separate 16-Bit Unsigned Modbus Register with the Values : 0 for 1 count, 1 for 0.1 count, 2 for 0.01 count, 3 for 0.001 count & 4 for 0.0001 count Resolution.

Alarms

- AL1 & AL2 can be independently enabled / disabled for Monitoring & Recording.
- Data Types : 16-Bit Unsigned Bit-Mapped Register & Discrete Coil (Read Only Bit).
- Modbus Register / Coil Address (0 to 65535).
- Configurable Bit Position (0 to 15) for Bit-Mapped Register Data Type.

PV Faults & Acknowledgment

- Fault Status monitoring can be Enabled / Disabled.
- Can read PV Fault Status encoded in PV Register or from separate Register / Coil.
- Configurable Fault acknowledge Register / Coil.
- User programmable Fault Names (Max. 8 Characters) for up to 5 Faults.

Project Tool & Utility

- Freely Sequence Channel Orders
- Copy Data for New Channel from Existing Channel
- Save Individual Channel to Disc File
- Add New Channel from the saved channel file
- Save & Retrieve Full Project to Disc File
- Download Project to UniRec - CZ Using PC Comm Port
- Simulate UniRec - CZ by directly connecting the Devices to PC Comm Port
- Read / Write other device parameters using Modbus Utility Tool

UniRec - CZ Features

- 2 Rows of 16 Characters LCD Display
- Process Value Indication with Channel Name
- Channel-wise Alarm Indications
- Programmable Recording Interval & Auto / Manual Display Mode (RTC Clock Change, Recording Interval Change & Power-up)
- Date / Time Stamped Records for PV, Alarms & Events
- Huge Data Storage Capacity (2 GB Memory, Approx. 38,56,000 Records)
- Direct Data Transfer to PC via Pen-Drive (Memory Stick)
- CSV (Comma Separated Values) formatted Records for Direct View in EXCEL Sheet
- 2 Common Relay Outputs for Alarms



UniRec - CZ Specifications

Digital Readout	2 Rows of 16 Characters LCD Display with Back-Light LED
Keys	4 Tactile Switches (PAGE, DOWN, UP, ENTER)
Pen-Drive Interface	USB Connector Type A
Recording Capacity	2 GB Flash Memory (Approx. 38,56,000 Records)
Recording Interval (User Settable)	Minimum : 1 Min Maximum : 250 Min
Alarm Outputs	1 Common High & 1 Common Low Alarm Relay (2A @ 230VAC)
Power Supply	85~264 VAC, 50/60 Hz, Single Phase
Dimensions (mm)	96 (H) X 96 (W) X 65 (D)
Mounting	Panel, Cutout 92 (H) X 92 (W), mm
Connections	Screw Type

Back Panel Terminations

