EMKO

CHANNEL8N 96 x 96 DIN 1/4 8 CHANNEL PT-100 SCANNER

CE

CHANNEL8N 8 Channel PT-100 Scanner
- 320 x 240 pixel TFT LCD display
- 8 PT-100 temperature sensor inputs
- ON-OFF control
- Relay or (pnp "source") transistor output
- Sensor error detection
- Adjustable temperature offset
- 3 Different alarm and pre-alarm types for each channel (High, Low and Band Alarms)
- User defined channel labels
- Display scan modes
- Operating with Real Time Clock (RTC)
- ModBus RTU communication protocol (RS-232, RS-485 and Ethernet communication)
- Data Logging to USB Flash Memory
- Adjustable data logging time interval
- Password protection for programming mode

CHANNEL8N series 8 channel PT100 scanner devices are designed for measuring and logging temperature. They can be used in many applications with their PT-100 process input, alarm outputs, selectable alarm functions, RS-232 / RS-485 / Ethernet / USB communications.

SPECIFICATIONS

INPUT
Thermoresistance(RTD) : 2 wire PT100 (IEC 751) (ITS90)
Measurement Range : -200°C / +650°C
Accuracy : ± 0.25% of full scale
Sensor Break Protection : Upscale
Sampling Time : 400msecs.
Line Compensation : Maximum 10 Ω
Input Ressistance : > 10MΩ

OUTPUT
Relay : Resistive Load 5A@250V~
(Electrical Life : 100.000 operation (Full Load)
Transistor : PNP(source) type transistor output (Max. 1A@24V⎓)

DISPLAY
LCD Display : 320x240 pixel TFT LCD

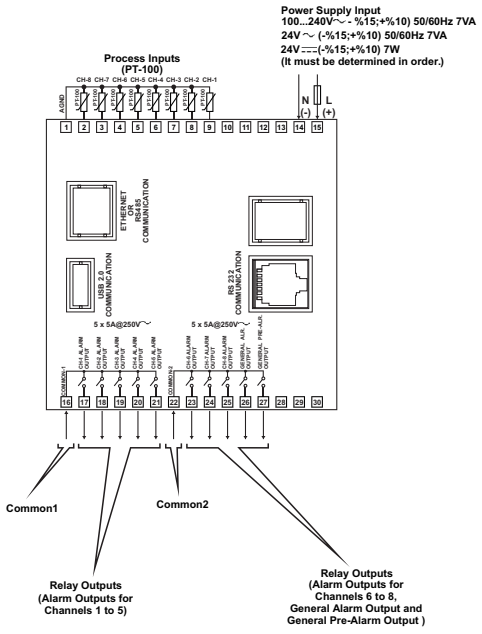
POWER SUPPLY
100 - 240 V~ (-%15 / +%10) 50/60 Hz. 7VA
24 V~ (-%15 / +%10) 50/60 Hz. 7VA
24 V⎓ (-%15 / +%10) 7W
(It must be determined in order.)

ENVIRONMENTAL RATINGS
Operating Temperature : 0...50°C
Humidity : 0-90%RH (none condensing)
Protection Class : IP65 at front, IP20 at rear

PHYSICAL SPECIFICATIONS
Weight : 400 gr.
Dimension : 96 x 96 mm, Depth:96 mm
Panel Cut-Out : 92 x 92 mm

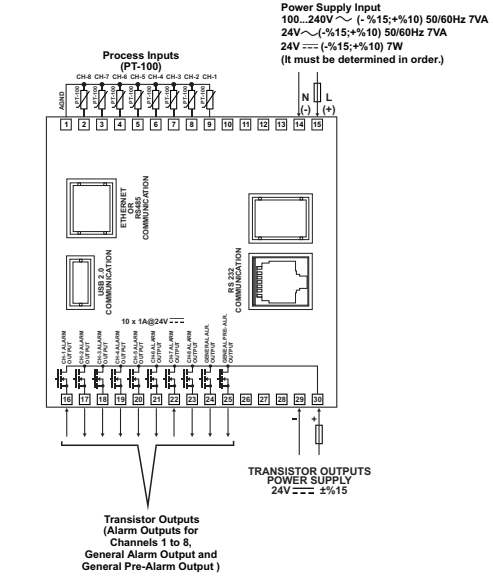
Electrical Wiring Diagram

Device with Relay Outputs



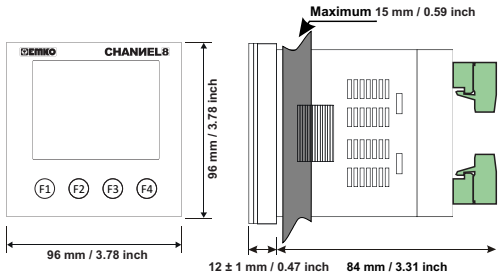
CH = CHANNEL
RS485, Ethernet and USB communications are optional

Device with Transistor Outputs

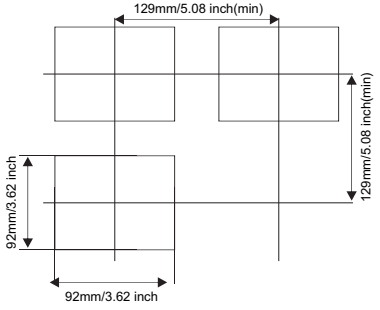


CH = CHANNEL
RS485, Ethernet and USB communications are optional

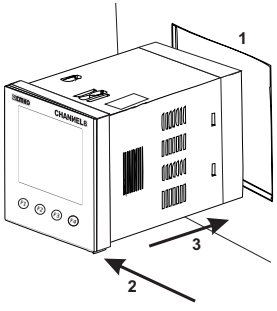
Front View and Dimensions of CHANNEL8N



Panel Cut-Out



Panel Mounting

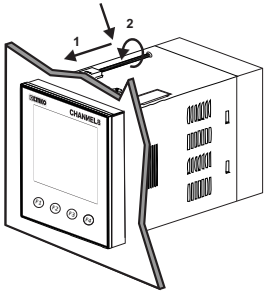


1-Before mounting the device in your panel, make sure that the cut-out is of the right size.

2-Check front panel gasket position

3-Insert the device through the cut-out. If the mounting clamps are on the unit, put out them before inserting the unit to the panel.

Installation Fixing Clamp

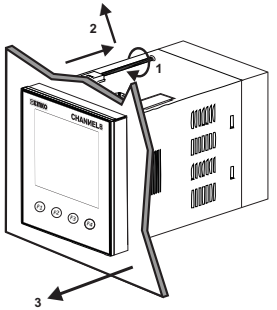


The unit is designed for panel mounting.

1-Insert the unit in the panel cut-out from the front side.

2- Insert the mounting clamps to the holes that located top and bottom sides of device and screw up the fixing screws until the unit completely immobile within the panel.

Removing from the Panel

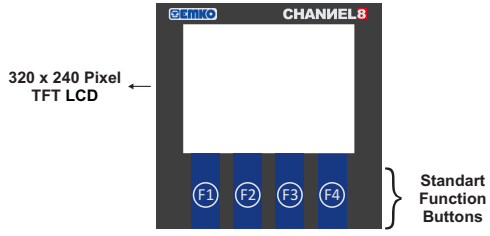


1-Loosen the screws.

2-Pull mounting clamps from top and bottom fixing sockets.

3-Pull the unit through the front side of the panel

Definition of Front Panel



MENU BUTTON
Used to access Menu page.

AUTO BUTTON
Used to auto-scan pages.

ENTER BUTTON
Used to go in to selected page, to make parameter's cell available to change and to confirm parameter's change.

BACK BUTTON
Used to go back to previous menu and to cancel parameter's change.

UP BUTTON
Used to go up in menus and lists and also used to increase parameter's value.

DOWN BUTTON
Used to go downin menus and lists and also used to decrease parameter's value.

LEFT BUTTON
Used to go left in menus.

RIGHT BUTTON
Used to go right in menus.

DELETE BUTTON
Used to erase logs on the screen.

SETTINGS

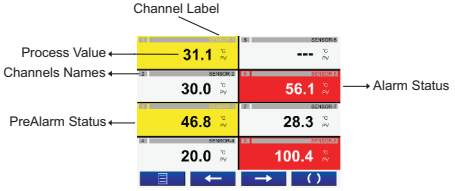
ADVANCE SETTINGS

LOGS

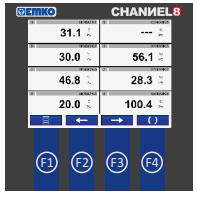
LANGUAGE

Main Operation Screens Defination

If the display type parameter value Screen Type = MULTIPLE

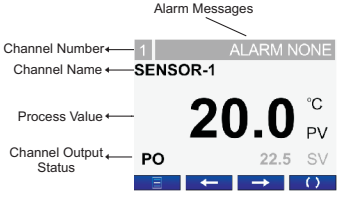


MAIN OPERATION SCREEN

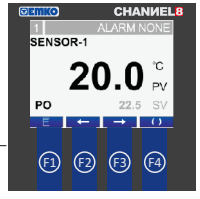


If the display scan parameter value Screen Change = ENABLE, each main operation screen is showing on LCD screen during time defined by Change Time parameter value.

If the display type parameter value Screen Type = SINGLE

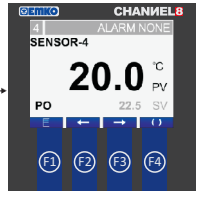


MAIN OPERATION (CHANNEL-1 SCREEN)



Press number F2 or F3 buttons for accessing the relevant channel screen.

MAIN OPERATION (CHANNEL-4 SCREEN)

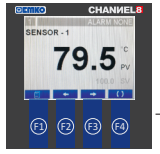


If more than one alarm messages is present, each alarm message is showing on LCD screen during 1 second.

If the display scan parameter value Screen Change = ENABLE, each main operation screen is showing on LCD screen during time defined by Change Time(sec) parameter value

Accessing to the Operator Parameter Pages

MAIN OPERATION SCREEN



When the F1 menu button is pressed while the main screen is on the page, the menu page is displayed.

MENU SCREEN

Press F1 or F2 direction buttons to move to the Settings tab.

OPERATOR PARAMETERS PASSWORD SCREEN

Press F3 button. If password is different from 0, password screen opens.

OPERATOR PARAMETERS PASSWORD SCREEN

Enter the password value using the F1 and F2 buttons.

OPERATOR PARAMETERS PASSWORD INPUT SCREEN

Confirm the characters one by one by pressing F3 button. Once you have confirmed the last character, you will proceed to the operator parameters screen.

OPERATOR PARAMETERS (CHANNEL-1)

Press the F1 and F2 buttons to highlight the channel and press the F3 button.

OPERATOR PARAMETERS (CHANNEL-1 PARAMETERS)

Select the relevant parameter with the F1 and F2 buttons.

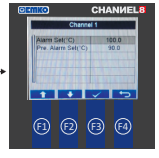
PARAMETERS CHANGE

Press the F3 button to select the parameter.

PARAMETERS CHANGE

Use the F1 and F2 buttons to change the value of the parameter.

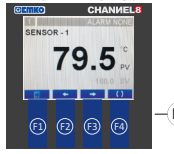
OPERATOR PARAMETERS (CHANNEL-1 PARAMETERS)



Press the F3 button to save the parameter value.

Accessing to the Technician Parameter Pages

MAIN OPERATION SCREEN



When the F1 menu button is pressed while the main screen is on the page, the menu page is displayed.

MENU SCREEN

Press F1 or F2 direction buttons to move to the Advanced Settings tab.

TECHNICIAN PARAMETERS PASSWORD SCREEN

Press F3 button. If password is different from 0, password screen opens.

TECHNICIAN PARAMETERS PASSWORD SCREEN

Enter the password value using the F1 and F2 buttons.

TECHNICIAN PARAMETERS PASSWORD INPUT SCREEN

Confirm the characters one by one by pressing F3 button. Once you have confirmed the last character, you will proceed to the operator parameters

TECHNICIAN PARAMETERS (CONTROL PARAMETERS

Use the F1 and F2 buttons to scroll to the Control parameters and press the F3 button.

TECHNICIAN PARAMETERS (CHANNEL-1)

Select the relevant channel with the F1 and F2 buttons.

TECHNICIAN PARAMETERS (CHANNEL-1 PARAMETERS)

Press the F3 button to select the parameter.

PARAMETERS CHANGE

Use the F1 and F2 buttons to change the value of the parameter. Press the F3 button to save the parameter value.

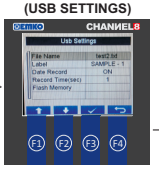
DEVICE SETTINGS (RS232 SETTINGS)

With the F1 and F2 buttons you can select and change the RS232 parameters. Use the F3 button to save.

DEVICE SETTINGS (Rs485 SETTINGS)

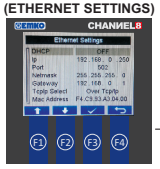
With the F1 and F2 buttons you can select and change the RS485 parameters. Use the F3 button to save.

DEVICE SETTINGS (USB SETTINGS)



With the F1 and F2 buttons you can select and change the USB parameters. Use the F3 button to save.

DEVICE SETTINGS (ETHERNET SETTINGS)



With the F1 and F2 buttons you can select and change the ETHERNET parameters. Use the F3 button to save.

DEVICE SETTINGS (DATE TIME SETTINGS)

With the F3 button you can select the Date and Time parameters and you can change the value with the F1, F2 buttons.

DEVICE SETTINGS (PASSWORD CHANGE)

Use the F1 and F2 buttons to change the value of the parameter. Confirm the characters one by one by pressing F3 button.

DEVICE SETTINGS (DEFAULT SETTINGS)

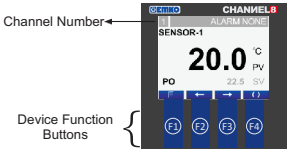
Use the F1 button to move to the "YES" tab and press the F3 button. In 1-3 seconds the device will return to factory settings.

If the device has a optional ETHERNET communication then ETHERNET page is observed, otherwise this page is not observed.

If the device has a optional RS485 communication then RS 485 page is observed, If the device has a optional USB communication then USB page is observed.

If no operation is performed for 20 seconds in operator or technician parameters section, device turns to main operation screen automatically.

Operator Pages Parameters Defination



Alarm Set
Alarm set value for selected channel is can be adjusted according to this parameter. It can be adjust between -200 °C to +650 °C.

Pre. Alarm Set
Pre- Alarm set value for selected channel is can be adjusted according to this parameter. It can be adjust between -200 °C to +650 °C.

Operator Password Change
Operator Password for device is adjusted by this parameter.

If no operation is performed for 20 seconds in operator parameters section, device turns to main operation screen automatically.

Technician Pages Parameters Definetions

Technician Parameters

Channel Status
Channel is enabled and disabled by this parameter. If channel is selected as a disabled this channel is can not be observed in main operation scren for single view mode, channel alarm is not be controlled and analogue value for this channel is can not be recording on USB file. It can be adjust between 0 to 1. If parameter value,
0 = DISABLE
1 = ENABLE

Channel Name "Channels label definition"
All channels have their own label, is displayed in main operation screen. channel labels is can be adjusted by this parameter. Channel labels are can be adjusted maximum 10 characters.

Alarm Type
Alarm type for selected channel is can be adjusted according to this parameter.
It can be adjust between 0 to 2. Parameter values;
0 = LOW
1 = HIGH
2 = BAND

PreAlarm Type
Pre-Alarm type for selected channel is can be adjusted according to this parameter.
It can be adjust between 0 to 2. Parameter values;
0 = LOW
1 = HIGH
2 = BAND

Hysteresis
Hysteresis parameter value for Alarm and Pre-Alarm is can be adjusted by this parameter. It can be adjust between -400 °C to +400 °C.

Band Alarm
Bandwith for Band alarm is can be adjusted by this parameter value.
It can be adjust between -400 °C to +400 °C.

Offset
Process offset value for selected channel is can be adjusted by this parameter.
It can be adjust between -50.0 °C to +50.0 °C.

Sensor Alarm
Sensor break alarm for selected channel is can be disable or enable by this parameter.
It can be adjust between 0 to 1. Parameter values;
0 = DISABLE
1 = ENABLE

Control Parameters- Other Parameters

Screen Type
Main operation screen type is adjusted by this parameter.
It can be adjust between 0 to 1. Parameter values;
0 = MULTIPLE
1 = SINGLE

Screen Change
Display channel scanner mode is adjusted by this parameter.
It can be adjust between 0 to 1. Parameter values;
0 = DISABLE
1 = ENABLE

Change Time(sec)
Display scan period is adjusted by this parameter. All main operation screen is displayed during time defined by this parameter. It can be adjust between 1 to 3600 secs.

BackLightOnLevel
Display backlight is can be controlled by this parameter value. It can be adjust between 50 to 100.

BackLightOffLevel
ECO mode for backlight; in case off selection no backlight . This parameter is can be adjusted from 1 to 100.

BackLightOffTime
Time for the access to ecomomic backlight mode. This parameter is can be adjusted from 10 to 300.

Device Settings - RS-232 Settings

Baudrate
Modbus communication baudrate for RS232 is can be adjusted by this parameter.
It can be adjust between 0 to 5. Parameter values;
0 = 4800
1 = 9600
2 = 19200
3 = 38400
4 = 57600
5 = 115200

Parity
Modbus communication parity bit for RS232 is can be adjusted by this parameter.
It can be adjust between 0 to 2. Parameter values;
0 = NONE
1 = ODD
2 = EVEN

Stop Bit
Modbus communication stop bit for RS232 is can be adjusted by this parameter.
It can be adjust between 1 to 2. Parameter values;
1 = 1 Stop bit
2 = 2 Stop bits

Id
Modbus communication device ID for RS232 is can be adjusted by this parameter.
This parameter value is can be adjusted from 1 to 247.

Device Settings - RS-485 Settings

Baudrate
Modbus communication baudrate for RS485 is can be adjusted by this parameter.
It can be adjust between 0 to 5. Parameter values;
0 = 4800
1 = 9600
2 = 19200
3 = 38400
4 = 57600
5 = 115200

Parity
Modbus communication parity bit for Rs485 is can be adjusted by this parameter.
It can be adjust between 0 to 2. Parameter values;
0 = NONE
1 = ODD
2 = EVEN

Stop Bit
Modbus communication stop bit for Rs485 is can be adjusted by this parameter.
It can be adjust between 1 to 2. Parameter values;
1 = 1 Stop bit
2 = 2 Stop bits

Id
Modbus communication device ID for Rs485 is can be adjusted by this parameter.
This parameter value is can be adjusted from 1 to 247.

Device Settings - USB Settings

File Name
USB file name for recording analogue values is can be adjusted by this parameter. File name can be adjusted maximum 10 characters. Recording file on usb is "csv" format and all data is seperated each other with tab. Example file format is explained below.

Label
When the analogue values are recorded on USB file, user can be defined label for this recording. Label can be adjusted maximum 10 characters. Label are recorded at the end of every lines of file.

Date Record
When the analogue values are recorded on USB file, user can be save the recording time on the file. Recording time is recorded at the beginning of every lines of file.
It can be adjust between 0 to 1. Parameter values;
0 = DISABLE
1 = ENABLE

Record Time(sec)
Record time interval is can be adjusted by this parameter. Analogue values are recorded on USB file with this time interval.It can be adjust between 0 to 3600 secs. If this parameter value is 0 usb recording is disabled.

Flash Memory "USB Flash Memory Stick Detected Test"
Detection of the USB memory device being inserted is tested with this parameter. When the USB memory device is plugged in, the message "OK" is displayed.

Internal Recording
The device can record in memory. When a USB memory is inserted, the recordings are transferred to the USB memory with the file name containing the current date and time.(Exp: 2017-07-30-09-08-12-CHAN8.txt) icon and transaction status (%) are displayed on the screen until the transfer is complete.
If you want to eject the USB memory during transfer or recording; Press the F4 button for 5 seconds and the USB memory must be removed (within 5 seconds) before the icon on the screen disappears. If the USB stick is not removed during this time, the transfer will resume from where it left off.
Not: The device can store up to (Record time x 2) daily memos in its memory.

USB Recording File Example

2011-06-23-17:26:09	130.6	129.1	130.5	129.5	130.0	129.9	130.3	129.1	SAMPLE
2011-06-23-17:26:10	130.6	129.1	130.5	129.5	130.0	129.9	130.3	129.1	SAMPLE
2011-06-23-17:26:12	130.6	129.1	130.5	129.5	130.0	129.9	130.3	129.1	SAMPLE
2011-06-23-17:26:13	130.6	129.1	130.5	129.5	130.0	129.9	130.3	129.1	SAMPLE
Recording Time	CH-1 Value	CH-2 Value	CH-3 Value	CH-4 Value	CH-5 Value	CH-6 Value	CH-7 Value	CH-8 Value	Label

Device Settings - ETHERNET Settings

DHCP
DHCP is an automatic configuration protocol used on IP networks, If DHCP is enable, device is adjust our ethernet communication configuration parameters (IP, Netmask,Gateway) dynamicaly for your network system. If DHCP is disable, you must adjust ethernet configuration parameters (IP, Netmask,Gateway) for your network system. It can be adjust between 0 to 1. Parameter Values;

0 = DHCP DISABLE
1 = DHCP ENABLE

Ip No
IP address for ethernet communication is can be adjusted by this parameter. If DHCP is selected as a enable there is no need to adjust to this parameter, if DHCP is selected as a disable then user must adjust this parameter.

Port No
Ethernet port number is can be adjusted by this parameter.

Netmask
Subnet mask for ethernet communication is can be adjusted by this parameter. If DHCP is selected as a enable there is no need to adjust to this parameter, if DHCP is selected as a disable then user must adjust this parameter according to the their own network system.

Gateway
Gateway for ethernet communication is can be adjusted by this parameter. If DHCP is selected as a enable there is no need to adjust to this parameter, if DHCP is selected as a disable then user must adjust this parameter according to the their own network system.

Tcplp Selection
TCP/IP Protocol is can be adjusted by this parameter. It can be adjust between 0 to 1.
0 = Modbus RTU Over TCP/IP
1 = Modbus RTU TCP/IP

Device Settings - Date and Time Settings
Date and Time for device is adjusted by this parameter.

Device Settings - Password Change
Technician Password for device is adjusted by this parameter.

Device Settings -Default Settings
This section is used to return default settings back.

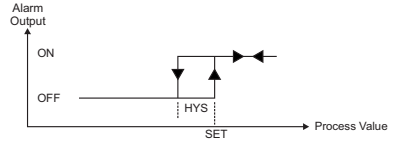
Device Settings - Software Update
It allows you to update the device's software with a USB flash memory.

Logs
In this page, events logs are shown.

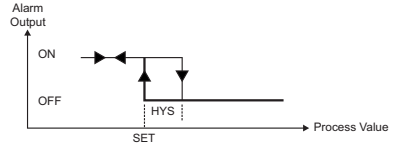
Language Selection
In this page, the language is selected for the device.

Operation Graphics of Alarm and Pre-Alarm Types

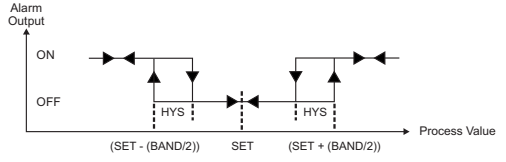
High Alarm



Low Alarm



Band Alarm



SET = Alarm or Pre-Alarm Set value
HYS = Hysteresis value for Alarm and Pre-Alarm output
BAND = Bandwidth for Band Alarm.

Modbus Addresses

Output Status Addresses

Outputs Status Addresses		Unit	Address
CH-1 ALARM OUT	Channel-1 Alarm Output Status	-	00001
CH-2 ALARM OUT	Channel-2 Alarm Output Status	-	00002
CH-3 ALARM OUT	Channel-3 Alarm Output Status	-	00003
CH-4 ALARM OUT	Channel-4 Alarm Output Status	-	00004
CH-5 ALARM OUT	Channel-5 Alarm Output Status	-	00005
CH-6 ALARM OUT	Channel-6 Alarm Output Status	-	00006
CH-7 ALARM OUT	Channel-7 Alarm Output Status	-	00007
CH-8 ALARM OUT	Channel-8 Alarm Output Status	-	00008
GEN. ALR. OUT	General Alarm Output Status	-	00009
GEN.PRE.ALR. OUT	General Pre-alarm Output Status	-	00010

Note-1: Outputs status are can be readed with modbus function-1 (read coils).
Device's response for modbus function-1 is always 2 byte data although the modbus function request less than 9 outputs port.

Process Values Addresses

Process Values Addresses		Unit	Address
CH-1 P. VALUE	Channel-1 Process Value	°C	30001
CH-2 P. VALUE	Channel-2 Process Value	°C	30002
CH-3 P. VALUE	Channel-3 Process Value	°C	30003
CH-4 P. VALUE	Channel-4 Process Value	°C	30004
CH-5 P. VALUE	Channel-5 Process Value	°C	30005
CH-6 P. VALUE	Channel-6 Process Value	°C	30006
CH-7 P. VALUE	Channel-7 Process Value	°C	30007
CH-8 P. VALUE	Channel-8 Process Value	°C	30008

Note-2: Process values are can be readed with modbus function-4 (read input register). Because of the process values are displayed on LCD screen with point, the reading values from modbus is 10 times than the real values.

Parameters Modbus Addresses

Parameter Values Addresses			Unit	Address
CH-1 NAME	Channel-1 Name		String	42000 - 42004
CH-2 NAME	Channel-2 Name		String	**42005 - 42009**
CH-3 NAME	Channel-3 Name		String	42010 - 42014
CH-4 NAME	Channel-4 Name		String	42015 - 42019
CH-5 NAME	Channel-5 Name		String	42020 - 42024
CH-6 NAME	Channel-6 Name		String	42025 - 42029
CH-7 NAME	Channel-7 Name		String	42030 - 42034
CH-8 NAME	Channel-8 Name		String	42035 - 42039
FILE NAME	USB File Name		String	42040 - 42044
LABEL	USB Label		String	42045 - 42049
CH-1 ALARM SET	Channel-1 Alarm Set Value	(+)	°C	42050
CH-1 PRE A. SET	Channel-1 Prealarm Set Value	(+)	°C	42051
CH-1 HYSTERESIS	Channel-1 Hysteresis Value	(+)	°C	42052
CH-1 BAND ALARM	Channel-1 Bandwith Value	(+)	°C	42053
CH-2 ALARM SET	Channel-2 Alarm Set Value	(+)	°C	42054
CH-2 PRE A. SET	Channel-2 Prealarm Set Value	(+)	°C	42055
CH-2 HYSTERESIS	Channel-2 Hysteresis Value	(+)	°C	42056
CH-2 BAND ALARM	Channel-2 Bandwith Value	(+)	°C	42057
CH-3 ALARM SET	Channel-3 Alarm Set Value	(+)	°C	42058
CH-3 PRE A. SET	Channel-3 Prealarm Set Value	(+)	°C	42059
CH-3 HYSTERESIS	Channel-3 Hysteresis Value	(+)	°C	42060
CH-3 BAND ALARM	Channel-3 Bandwith Value	(+)	°C	42061
CH-4 ALARM SET	Channel-4 Alarm Set Value	(+)	°C	42062
CH-4 PRE A. SET	Channel-4 Prealarm Set Value	(+)	°C	42063
CH-4 HYSTERESIS	Channel-4 Hysteresis Value	(+)	°C	42064
CH-4 BAND ALARM	Channel-4 Bandwith Value	(+)	°C	42065
CH-5 ALARM SET	Channel-5 Alarm Set Value	(+)	°C	42066
CH-5 PRE A. SET	Channel-5 Prealarm Set Value	(+)	°C	42067
CH-5 HYSTERESIS	Channel-5 Hysteresis Value	(+)	°C	42068
CH-5 BAND ALARM	Channel-5 Bandwith Value	(+)	°C	42069
CH-6 ALARM SET	Channel-6 Alarm Set Value	(+)	°C	42070
CH-6 PRE A. SET	Channel-6 Prealarm Set Value	(+)	°C	42071
CH-6 HYSTERESIS	Channel-6 Hysteresis Value	(+)	°C	42072
CH-6 BAND ALARM	Channel-6 Bandwith Value	(+)	°C	42073
CH-7 ALARM SET	Channel-7 Alarm Set Value	(+)	°C	42074
CH-7 PRE A. SET	Channel-7 Prealarm Set Value	(+)	°C	42075
CH-7 HYSTERESIS	Channel-7 Hysteresis Value	(+)	°C	42076
CH-7 BAND ALARM	Channel-7 Bandwith Value	(+)	°C	42077

CH-8 ALARM SET	Channel-8 Alarm Set Value (•)	°C	42078
CH-8 PRE A. SET	Channel-8 Prealarm Set Value (•)	°C	42079
CH-8 HYSTERESIS	Channel-8 Hysteresis Value (•)	°C	42080
CH-8 BAND ALARM	Channel-8 Bandwith Value (•)	°C	42081
CH-1 ALARM TYPE	Channel-1 Alarm Type	-	42082
CH-1 PRE.A TYPE	Channel-1 Prealarm Type	-	42083
CH-1 SENSOR ALARM	Channel-1 SensorBreak Alarm	-	42084
CH-2 ALARM TYPE	Channel-2 Alarm Type	-	42085
CH-2 PRE.A TYPE	Channel-2 Prealarm Type	-	42086
CH-2 SENSOR ALARM	Channel-2 SensorBreak Alarm	-	42087
CH-3 ALARM TYPE	Channel-3 Alarm Type	-	42088
CH-3 PRE.A TYPE	Channel-3 Prealarm Type	-	42089
CH-3 SENSOR ALARM	Channel-3 SensorBreak Alarm	-	42090
CH-4 ALARM TYPE	Channel-4 Alarm Type	-	42091
CH-4 PRE.A TYPE	Channel-4 Prealarm Type	-	42092
CH-4 SENSOR ALARM	Channel-4 SensorBreak Alarm	-	42093
CH-5 ALARM TYPE	Channel-5 Alarm Type	-	42094
CH-5 PRE.A TYPE	Channel-5 Prealarm Type	-	42095
CH-5 SENSOR ALARM	Channel-5 SensorBreak Alarm	-	42096
CH-6 ALARM TYPE	Channel-6 Alarm Type	-	42097
CH-6 PRE.A TYPE	Channel-6 Prealarm Type	-	42098
CH-6 SENSOR ALARM	Channel-6 SensorBreak Alarm	-	42099
CH-7 ALARM TYPE	Channel-7 Alarm Type	-	42100
CH-7 PRE.A TYPE	Channel-7 Prealarm Type	-	42101
CH-7 SENSOR ALARM	Channel-7 SensorBreak Alarm	-	42102
CH-8 ALARM TYPE	Channel-8 Alarm Type	-	42103
CH-8 PRE.A TYPE	Channel-8 Prealarm Type	-	42104
CH-8 SENSOR ALARM	Channel-8 SensorBreak Alarm	-	42105
TECH. PW.	Technician Section Password	-	42106
OPR. PW.	Operator Section Password	-	42107
CH-1 I/O	Channel-1 Enable/Disable	-	42108
CH-2 I/O	Channel-2 Enable/Disable	-	42109
CH-3 I/O	Channel-3 Enable/Disable	-	42110
CH-4 I/O	Channel-4 Enable/Disable	-	42111
CH-5 I/O	Channel-5 Enable/Disable	-	42112
CH-6 I/O	Channel-6 Enable/Disable	-	42113
CH-7 I/O	Channel-7 Enable/Disable	-	42114
CH-8 I/O	Channel-8 Enable/Disable	-	42115
CH-1 P.V OFFSET	Channel-1 Process Offset (•)	°C	42116
CH-2 P.V OFFSET	Channel-2 Process Offset (•)	°C	42117
CH-3 P.V OFFSET	Channel-3 Process Offset (•)	°C	42118
CH-4 P.V OFFSET	Channel-4 Process Offset (•)	°C	42119
CH-5 P.V OFFSET	Channel-5 Process Offset (•)	°C	42120
CH-6 P.V OFFSET	Channel-6 Process Offset (•)	°C	42121
CH-7 P.V OFFSET	Channel-7 Process Offset (•)	°C	42122
CH-8 P.V OFFSET	Channel-8 Process Offset (•)	°C	42123
RS232 BAUDRATRE	RS232 Baudrate Selection	-	42124
RS232 PARITY	RS232 Parity Bit Selection	-	42125
RS232 STOP BIT	RS232 Stop Bit Selection	-	42126
RS232 ID	RS232 Device ID Value	-	42127
DSP. TYPE	Main Operation Screen Type	-	42128
DSP. SCAN	Display Scan ON/OFF	-	42129
SCAN TIME	Display Scan Period	Sec	42130
DSP BACKLIGHT	LCD Display Backlight Mode	-	42131
RS485 BAUDRATRE	RS485 Baudrate Selection	-	42132
RS485 PARITY	RS485 Parity Bit Selection	-	42133
RS485 STOP BIT	RS485 Stop Bit Selection	-	42134
RS485 ID	RS485 Device ID Value	-	42135
LANGUAGE	Device Language Selection	-	42136
SAVE TIME	USB Time Record Ena/Dis	-	42137
SAMPLE TIME	USB Record Time Interval	Sec	42138
DHCP	Dhcp Enable/Disable	-	42150
ETH. PORT	Ethernet Port No	-	42151
ETH. IP NO	Ethernet Ip No	-	42152
ETH. NETMASK	Ethernet Netmask	-	42154
ETH. GATEWAY	Ethernet Gateway	-	42156
MAC ADR.	Device Mac Address	-	42158

(•) These parameters are displayed on LCD screen with point, so that the parameters values are 10 times than the real values for modbus function.

Installation

Before beginning installation of this product, please read the instruction manual and warnings below carefully.

In package ,
- One piece unit
- Two pieces mounting clamps
- One piece instruction manual

A visual inspection of this product for possible damage occured during shipment is recommended before installation. It is your responsibility to ensure that qualified mechanical and electrical technicians install this product.

If there is danger of serious accident resulting from a failure or defect in this unit, power off the system and separate the electrical connection of the device from the system.

The unit is normally supplied without a power supply switch or a fuse. Use power switch and fuse as required.

Be sure to use the rated power supply voltage to protect the unit against damage and to prevent failure.

Keep the power off until all of the wiring is completed so that electric shock and trouble with the unit can be prevented.

Never attempt to disassemble, modify or repair this unit. Tampering with the unit may results in malfunction, electric shock or fire.

Do not use the unit in combustible or explosive gaseous atmospheres.

During the equipment is putted in hole on the metal panel while mechanical installation some metal burrs can cause injury on hands, you must be careful.

Montage of the product on a system must be done with it's fixing clamps. Do not do the montage of the device with inappropriate fixing clamp. Be sure that device will not fall while doing the montage.

It is your responsibility if this equipment is used in a manner not specified in this instruction manual.

Warranty

EMKO Elektronik warrants that the equipment delivered is free from defects in material and workmanship. This warranty is provided for a period of two years. The warranty period starts from the delivery date. This warranty is in force if duty and responsibilities which are determined in warranty document and instruction manual performs by the customer completely.

Maintenance

Repairs should only be performed by trained and specialized personnel. Cut power to the device before accessing internal parts.
Do not clean the case with hydrocarbon-based solvents (Petrol, Trichlorethylene etc.). Use of these solvents can reduce the mechanical reliability of the device. Use a cloth dampened in ethyl alcohol or water to clean the external plastic case.

Other Information

Manufacturer Information:
Emko Elektronik Sanayi ve Ticaret A.Ş.
Demirtaş Organize Sanayi Bölgesi Karanfil Sk. No:6 16369 BURSA / TURKEY
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Repair and maintenance service information:
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Tel : +90 224 261 1900
Fax : +90 224 261 1912

Ordering Informations

CHANNEL8N
(96 x 96 1/4 DIN)

A	/	B	CDE
	/		

A	Supply Voltage
1	100...240V ~ (- %15;+%10) 50/60Hz
2	24V ~ (-%15;+%10) 50/60Hz 24V ⎓ (-%15;+%10)

B	Output Module Type
R	10 Relay outputs with 2 common for each NO contact 5A max. (5A@250V at resistive load) for each Common contact 15A max (15A@250V at resistive load)

CDE	Communication Type
200	RS-232 Modbus RTU
20U	USB + RS-232 Modbus RTU
240	RS-485("500VAC isolation") + RS-232 Modbus RTU
2E0	Ethernet + RS-232 Modbus RTU
2EU	Ethernet + USB + RS-232 Modbus RTU
24U	USB + RS-485 + RS-232 Modbus RTU

All order information of CHANNEL8N are given in the table above. User may form appropriate device configuration from information and codes that at the table and convert it to the ordering codes.

Firstly, supply voltage then other spesifications must be deteermined. Please fill the order code blanks according to your needs.

Please contact us, if your needs are out of the standards.

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www.emkoelektronik.com.tr