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## UCM-234

**Main features:**

- 16 Analog Inputs;
- 8 Discrete Inputs;
- 16 Relay Outputs;
- Data archive (up to 8MB flash) with real time stamp;
- Remote control over Ethernet, RS232, RS485, IrDA, IP protocol;
- Power supplier 9 - 36VDC;

<b>First interface</b> (galvanically isolated)		
RS485	distance up to 1,2km, max 32 transivers, speed up to 19.2 Kbits/s	
RS232	distance up to 15m, speed up to 19,2Kbit/s	
<b>Second interface</b>		
RS485	distance up to 1,2km, max 32 transivers, speed up to 19.2 Kbits/s	
RS232	distance up to 15m, speed up to 19,2Kbit/s	
<b>Third interface</b>		
<b>Fourth interface</b>		
Ethernet	twisted pair, 10/100 Mbps, distance up to 100m	
<b>Fifth interface</b>		
<b>Discrete and Analog interfaces</b>		
Discrete IN	8	sink contact
Discrete OUT	16	relay (220VDC/3A; 24VAC/1A)
Analogi IN	16	resistance, voltage or current, reading 10 times per second
<b>Protocols</b>		
	Modbus RTU Modbus TCP/IP IP ICMP UDP TCP DHCP PPP ARP SNTP IEC60870-5-104:2000 DynDNS FTP server FTP client DNS client	

<b>General</b>		
Power	9-36 VDC	
<b>Specification</b>		
CPU	CORTEX M4	
Memory	archive storage 1-8 MB, independant data storage without power about 5 years	
<b>LED indication</b>		
Power	+	
Status of discrete input, for each port	+	
Serial ports read/write for each port	+	
Ethernet status	+	
<b>Programing and updating</b>		
Remote	Ethernet (RJ45)	
Locally	USB, RS232, RS485	
<b>Physical characteristics</b>		
Dimmensions	277x128x50 mm	
Weight	800 g	
Mounting type	on DIN35 rail	
Safety class	IP20	
<b>Climate conditions</b>		
Operating temperature	-25..+60 °C	
Storage temperature	-40..+60 °C	
Humidity range	5-95%, non-condensing	
<b>Other fuetures</b>		
Real time clock	+	
24 months warranty period	+	
<b>MAX number of interfaces (for filter)</b>		
Number of supported interfaces	3	
RS485	+	distance up to 1,2km, max 32 transivers, speed up to 19,2 Kbits/s
RS232	+	distance up to 15m, speed up to 19,2Kbit/s
Ethernet	+	twisted pair, 10/100 Mbps, distance up to 100m
USB (device)	+	Type B, ver. 2.0

## OVERVIEW

Module UCM-234 is created for measuring of analog (voltage, current, resistance) parameters, for tracking the status of discrete inputs, formation of analog and discrete output signals, archiving and sending data to local operator over RS232/RS485 and/or USB and to remote operator over Ethernet.

## DEFAULT FEATURES

- 16 analog and 8 discrete inputs and 16 relay outputs;
- Data sending over Ethernet using Modbus TCP/IP protocol;
- Data log (up to 8MB flash) with real time stamp;
- Alarm limits tracing of analog and discrete inputs, logging in event archive, warning about alarms over Ethernet.
- Alarms status of analog and discrete channels fixing;
- Data from local device reading over RS232/RS485 interfaces;
- Supported wide range of power supplier (from 9 to 36V) and wide range of operating temperatures (from -25 oC to +60 oC);
- Firmware updating and configuration over any of installed interfaces.

## CUSTOMIZING DEVICE

The exceptional feature of this device - a flexible hardware and software configuration, it depends on customer needs. You can choose the desired interfaces and functionality.

Socket No.	RS232	RS485	M-bus	Ethernet
A	○*	○		
B	○*	○		
C			○*	
D				○*

Analog inputs	16	Discrete inputs	8	Discrete relay outputs	16
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○-optional one interface per socket; \*-galvanically isolated;

Manufacturers code:

	Channel 1-4	Channel 5-8	Channel 9-12	Channel 13-16
0 - none	1 - Current 0/4..20mA analog inputs	1 - Current 0/4..20mA analog inputs	1 - Current 0/4..20mA analog inputs	1 - Current 0/4..20mA analog inputs
1 - RS485	2 - Voltage 0 - 5V analog inputs	2 - Voltage 0 - 5V analog inputs	2 - Voltage 0 - 5V analog inputs	2 - Voltage 0 - 5V analog inputs
2 - RS232	3 - Voltage 0 - 10V analog inputs	3 - Voltage 0 - 10V analog inputs	3 - Voltage 0 - 10V analog inputs	3 - Voltage 0 - 10V analog inputs
0 - none	4 - Thermoresistor (Pt100) analog IN	4 - Thermoresistor (Pt100) analog IN	4 - Thermoresistor (Pt100) analog IN	4 - Thermoresistor (Pt100) analog IN
1 - RS485	5 - Thermoresistor (Pt1000) analog IN	5 - Thermoresistor (Pt1000) analog IN	5 - Thermoresistor (Pt1000) analog IN	5 - Thermoresistor (Pt1000) analog IN
2 - RS232	7 - Thermoresistance (NTC) 0-30 kΩ	7 - Thermoresistance (NTC) 0-30 kΩ	7 - Thermoresistance (NTC) 0-30 kΩ	7 - Thermoresistance (NTC) 0-30 kΩ
0 - none	0 - none	0 - none	0 - none	0 - none
1 - Ethernet				4 - 4 discrete inputs
0 - none				8 - 8 discrete inputs
1 - Ethernet				0 - none
0 - none				1 - 4 discrete relay outputs
1 - RS485				2 - 8 discrete relay outputs
2 - RS232				3 - 12 discrete relay outputs
0 - none				4 - 16 discrete relay outputs
1 - Ethernet				

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**A**

**B**

**C**

**D**

**E**

**F**

**G**

**H**

**I**