



V.Bartkevicius company "VALSENA"  
Savanoriu ave. 271 - 412 Kaunas LT 50131, Lithuania  
Phone: 370 37 310603 Fax: 370 37 310648  
E-mail: valsena@valsena.lt

## MPC-333



### Main features:

- Freely chosen interfaces: up to 6 interfaces.
- Supported interfaces: RS485, RS232, Opto (Kamstrup), Mbus, Current loop, GSM/GPRS and LAN.
- Discrete inputs: up to 8 devices
- Supported protocols: Modbus RTU, Modbus TCP/IP, IP, ICMP, UDP, TCP, DHCP, PPP, ARP, SNMP, IEC60870-5-104:200 and transparent.
- Routing: GSM - Ethernet routing
- Special: transparent non-standart protocol data transfer
- Power: 9-36 or 12-50 VDC (10VA)
- Power for external devices: 3,7; 5; 6; 8 or 10 VDC (20mA)

First interface		
RS232	distance up to 15m, speed up to 19,2Kbit/s	
GSM/GPRS	4 band 850/900/1800/1900 MHz	
Second interface (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	
Opto	(Kamstrup) data transfer interface	
MBus	up to 8 devices	
2 wire active Current Loop	25-27V, 14-20mA, up to 6km, speed up to 19,2Kbit/s	
Third interface (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	
Opto	(Kamstrup) data transfer interface	
2 wire active Current Loop	25-27V, 14-20mA, up to 6km, speed up to 19,2Kbit/s	
Power for exteranl devices	3,7/5/6/8/10 V	
Fourth interface		
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	
Sixth interface		
USB (device)	Type B, ver. 2,0	
Discrete and Analog interfaces		
Discrete IN	8	sink contact
Protocols		

	Modbus RTU Modbus TCP/IP IP ICMP UDP TCP DHCP PPP ARP SNTP IEC60870-5-104:2000 DynDNS FTP server FTP client DNS client	
General		
Power	9-36 or 12-50 VDC	
Galvanic isolation	>1000V	
Capacity	<10VA	
Power for external devices	3,7/5/6/8/10 VDC (20mA)	
Regulatory approvals		
Electromagnetic compatibility	EN 55022:2010 EN 55024:2010 EN 61000-4-2:2009 EN 61000-4-3:2006 EN 61000-4-3:2006/A1:2008 EN 61000-4-3:2006/A2:2010 EN 61000-4-4:2004 EN61000-4-4:2004/A1:2010 EN 61000-4-6:2009	
Safety	EN 60950-1:2006 EN 60950-1:2006/A11:2009	
Specification		
CPU	ARM7	
Memory	archive storage 1-8 MB, independant data storage without power about 5 years	
LED indication		
Power	+	
Status of discrete input, for each port	+	
Serial ports read/write for each port	+	
GSM/GPRS modem status	+	
Ethernet status	+	
Programing and updating		
Remote	GSM/GPRS, Ethernet (RJ45)	
Locally	USB, RS232, RS485	
Physical characteristics		
Dimmensions	197x128x50 mm	
Weight	400 g	
Mounting type	on DIN32 rail	
Safety class	IP20	
Climate conditions		
Operating temperature	-25..+60 °C	
Storage temperature	-40..+60 °C	
Humidity range	5-95%, non-condensing	
Other fuetures		
Real time clock	+	
MBus auto setup	+	
24 months warranty period	+	
MAX number of interfaces (for filter)		
Number of supported interfaces	6	
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
Opto	+	(Kamstrup) data transfer interface

Mbus	+	up to 8 devices
Current Loop	+	Active or Pasive, 2 or 4 wire
Ethernet	+	twisted pair, 10/100 Mbps, distance up to 100m
USB (device)	+	Type B, ver. 2,0
USB (host)	-	Type A, ver. 2,0
HART	-	
Power for external devices	+	3,7/5/6/8/10 V
Universal	-	Jumper switchable
GSM/GPRS	+	4 band 850/900/1800/1900 MHz

## OVERVIEW

MPC-333 controller is created for data logging and analyzing in a real time. Using GPRS/GSM and/or Ethernet, controller sends saved data and reports to remote users.

Controller supports most of protocols and interfaces (RS232, RS485, MBUS, Opto, Current loop, Discrete inputs), so it can be used with different brands and models of counters. Our special [“TRANSPARENT”](#) data transfer protocol enables controllers to use with practically any device.

Device supports wide range of protocols (and can be extended by our programmers, if you need some special). For data exchange over GPRS/GSM, Ethernet and/or any Serial interfaces, controller uses Modbus TCP/IP, Modbus RTU, IEC60870-5-104:2000, SNTP and other protocols.

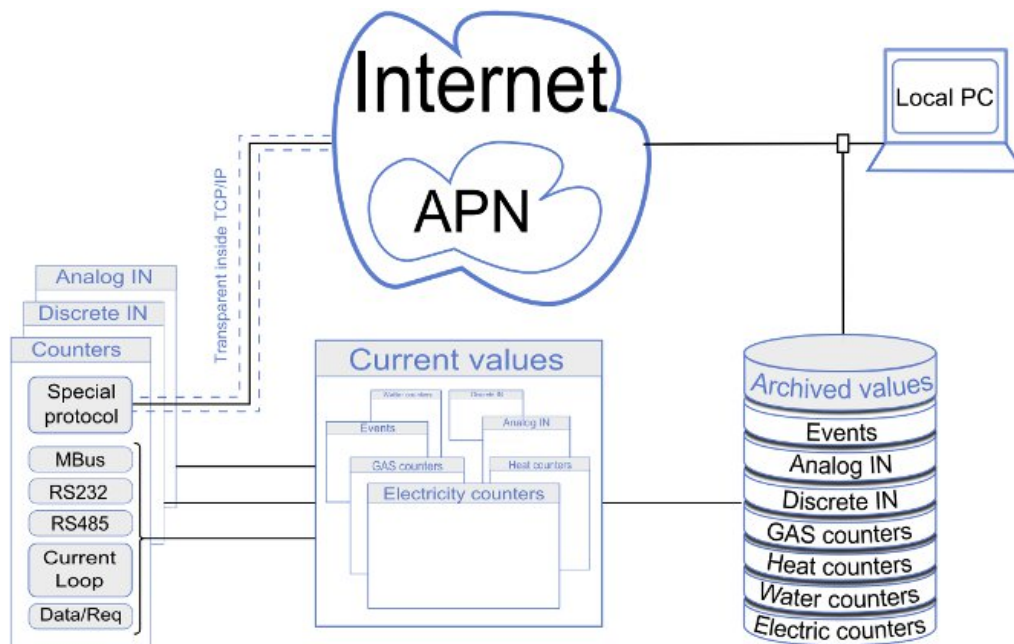
Our clients – GAS, Heat, Watering suppliers, Industry companies in EU, Ukraine, Central Asia.

## DEFAULT FEATURES

- Reading data from energy carrier meters;
- “TRANSPARENT” remote data reading from counters (special manufacturers protocols);
- Discrete input/output ports;
- Independent data log (up to 8MB) with real time stamp;
- Remote configuration and upgrading possibilities over GPRS/GSM and Ethernet;
- Wide range of interfaces: GSM/GPRS, Ethernet, RS232, RS485, Current Loop, USB, Opto, Mbus;
- Galvanically isolated interfaces and power supply;
- Power supply for external powering of counters.

## BENEFIT TO THE CLIENT

- Economy, because controller does a lot of mechanic work, so your professionals can do more important work;
- Increase efficiency, because the data are sent to a central computer continuously. If connection is lost, data will be safe kept in controllers memory, until connection will be reestablished;
- Increases security, because the relevant information is rapidly shorten response time;
- Versatile, because this controller can retrieve data from different manufacturers and even different types of meters;
- Simplicity, because of intuitive control and optimally assembled LED's it is easy to monitor and maintain equipment;
- A good partner, because we not only help you customize and will make equipment, but also flexibly adapt controller, if your demands will change.



## CUSTOMIZING DEVICE

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



Interface	RS232	RS485	Opto	MBUS	Current loop	Ethernet	GSM (GPRS)	Power for ext. dev.
A	○						○	
B	○*	○*	○*	○*	○*			
C	○*	○*	○*		○*			○
D	○	○						
E						○		
F								

○ - optional one interface per socket; \* - galvanically isolated

<b>Discrete IN</b>	<b>8</b>
--------------------	----------

Manufacturers code:

702.031.

	0 - none 1 - GPRS/GSM 2 - RS232
A	
B	 0 - none 1 - RS485 2 - RS232 3 - Opto 4 - Mbus 5 - Current loop
C	 0 - none 1 - RS485 2 - RS232 3 - Opto 5 - Current loop
D	0 - none 1 - RS485 2 - RS232
E	0 - none 1 - Ethernet
F	0 - none 1 - Power for external devices
G	0 - none 4 - 4 discrete inputs 8 - 8 discrete inputs
H	0 - none 1 - Real Time Clock (RTC)
I	1 - 9-36 VDC 2 - 12-50 VDC

702.031.1432.1.0.4.1.0 - (GPRS, Mbus, Opto, RS232, Ethernet, 4 Discrete\_IN, RTC, 9-36VDC)

