

RTCU-MAX-RMR

Remote Telemetry and Control Unit

The RTCU-MAX is the most advanced unit in the RTCU product line with an impressive list of features and possibilities. The product is a unique combination of a powerful Programmable Logic Controller (PLC) and a GSM phone tightly connected in a single easy programmable unit. The RTCU-MAX product provides the user friendly answer to your remote monitoring, remote control, surveillance and datalogging needs.



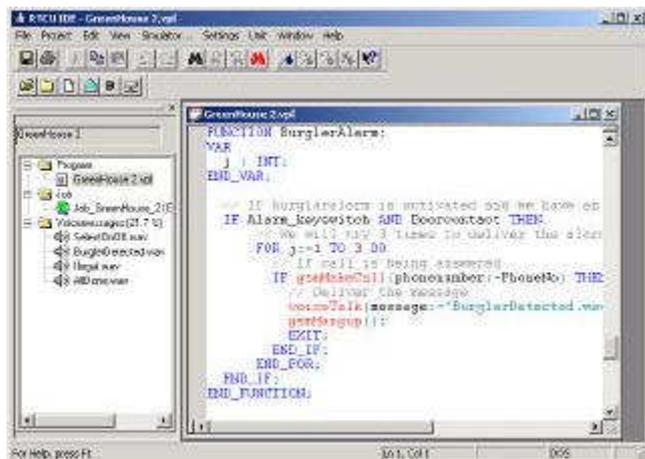
The RTCU-MAX product allows rapid development of custom specified applications combining control / monitoring / datalogging with advanced communication techniques such as voice / DTMF interaction (voice response systems), alarm/messages send to / from the unit as SMS messages or via data-transfer directly to / from most Windows application utilizing standard Windows DDE. The product includes a user-friendly Integrated Development Environment (RTCU IDE) running under Windows where the complete application is developed and finally transferred to the unit via a standard serial port, or alternatively using the GSM data transfer capability. The product offers optional integration support with popular SCADA software packages from fex, Wonderware or Citect.

The unit is programmed in a PLC language called VPL based on the ST language from the international standard IEC1131-3. This language is very easy to learn and can be compared to BASIC / PASCAL but with a number of facilities to allow easy development of PLC-like applications. Voice-messages are also created within the environment by the use of a simple microphone and a soundcard in the PC. The RTCU IDE environment also includes a very sophisticated simulator so that the application can be executed and debugged under Windows - before being transferred to the physical unit !. From the VPL language all the resources on the platform is easily accesible, such as: send / receive SMS-messages, receive / initiate GSM calls, voice, DTMF interaction, Realtime clock, datalogging as well as low level functions such as Timers, up / down counters, edge triggers etc. As an option a support package for data-transfer is available that allows easy data-transfer to / from the unit from within a standard Windows application.

Stay ahead and choose the Logic IO RTCU-MAX product when dealing with advanced and flexible GSM based control/monitoring/datalogging applications!

Some of the application areas includes:

- Surveillance of industrial equipment
- Remote site control and data acquisition
- Dataloggers
- Remote Meter Reading
- Process monitoring and reporting
- Alarm / Security systems
- Mobile applications using optional GPS module



The RTCU-IDE Integrated Development Environment for the RTCU, is an easy-to-use program for all aspects in the development of applications for the RTCU. The RTCU-IDE contains a broad range of features, such as project control, comprehensive online help, built-in syntax highlighting editor, code generating wizard, voice recorder etc. A built-in simulator, enables complete simulation of all features on the actual RTCU: GSM phone, SMS messaging, LCD Display, Analog / Digital I/O etc. A remote update feature allows the application developer to download new versions of a program or voice messages to a remote RTCU, via a simple telephone modem connected to the PC. Together, all of these features enables the user to cut development time to a minimum.

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Key features:

- 4 Digital inputs, galvanically isolated (config. as S0 inputs)
- 4 Relay outputs or 4 solid-state outputs
- 4 Analog inputs, 0..5VDC
- 4 Analog outputs, 0..5VDC
- GSM Phone for voice, data, SMS, fax, email etc.
- Real Time Clock with battery backup (standard 7 hour)
- 3 User defined dipswitches
- 4 User defined LED indicators
- Supervises its own supply voltage
- RS232 Serial port (110 bps to 115 Kbps)
- Standard SIM card reader
- Power-fail detection with up to 200 ms execution time.
- 64 Kbyte storage for VPL programs
- Upto 3 Kbyte storage for user variables
- 64 Kbyte storage for strings
- 70 seconds storage for voicemessages (upgradeable to 560 sec)
- Maximum of 128 seperate voicemessages
- 256 Kbyte memory for datalogging (upgradeable to 2 Mbytes)
- 16 simultaneous VPL jobs operating in one of two priorities
- Optional RS485 multidrop network
- Optional temperature sensor onboard

Analog inputs	Min		Max		
	0	-	+5	VDC	Resolution is 10 bits. All inputs are protected against transients and lowpass filtered.

Analog outputs	Min		Max		
	0	-	+5	VDC	Resolution is 10 bits. All outputs are protected against transients and lowpass filtered.

Digital inputs		Min	Typ	Max		All inputs are protected against transients and lowpass filtered. All inputs are optically isolated
	Logic "High"	8	10	40	VDC	
	Logic "Low"	-5	-	5	VDC	

Digital outputs (Relay SPST)		Min		Max		
		-	-	5	Amp	At 250 VAC
		0.01	-	5	Amp	At 30 VDC

Digital outputs (Solid state)		Min		Max		
		-	-	60	Volt	Outputs are NOT protected against inductive loads ! (Use external protection if driving inductive loads such as relays)
		-	-	0.5	Amp	

Power supply		Min	Typ	Max		Selectable between AC and DC supply, protected againts wrong polarity and self healing fuse. 230VAC is fused.
		8	-	36	VDC	
		210	-	250	VAC	

Power consumption	90	140	250	mA	At 24 VDC supply voltage
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Protection	IP67				The enclosure contains 2 PG9 and 1 PG11 cable glands for cable entries. GSM Antenna connector is a SMA Female connector (located inside the unit, feed cable thru cable gland)
External dimensions	W 130 x H 180 x D 50 mm				
Storage temperature	-40		+90	°C	
Operating temperature	-20		+50	°C	
Approvals	EN-50081-1 Emission EN-61000-6-2 Immunity				Unit is CE approved 

Technical data subject to change

For more information:

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