

# RTCU-M7 MAX

## Remote Telemetry and Control Unit

The RTCU-M7 MAX is an advanced unit in the RTCU product line with an impressive list of features and possibilities. The product is a unique combination of a powerful PLC and a GSM phone tightly connected in a single easy programmable unit with external GPS-Smartantenna. The RTCU-M7 MAX product provides the user friendly answer to your mobile tracking, remote monitoring, remote control, surveillance and datalogging needs.



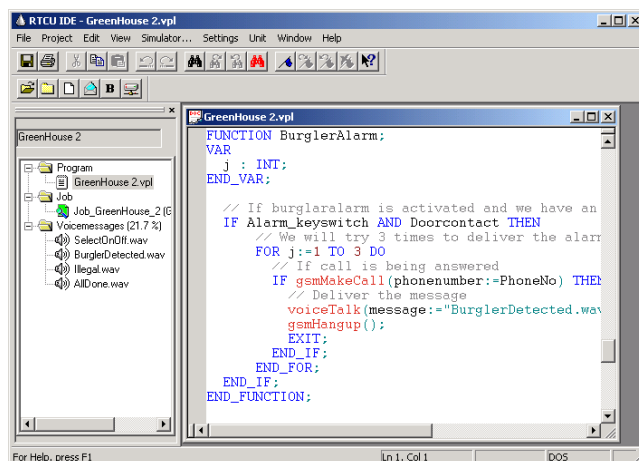
The RTCU-M7 MAX product allows rapid development of custom specified applications combining mobile tracking / control / monitoring / datalogging with advanced communication techniques such as voice / DTMF interaction (voice response systems), alarm/messages send to / from the unit as SMS (both as SMS and PDU) messages or via data-transfer directly to / from a Windows application. The RTCU-M7 MAX has seamless support for connection of an external GPS-Smartantenna via the RS232 connection port. 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 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 complete 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 accessible, such as: send / receive SMS-messages, receive / initiate GSM calls, GPS, 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-M7 MAX product when dealing with advanced and flexible GSM/GPS based mobile tracking/control/monitoring/datalogging applications!*

### Some of the application areas includes:

- ❖ Fleet management system.
- ❖ Mobile datalogging applications.
- ❖ Alarm / Security systems
- ❖ Mobile tracking applications
- ❖ Asset management.
- ❖ Your applications...




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 RTCU: GSM phone, SMS messaging, GPS, 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
- ❖ 4 Solid-state outputs
- ❖ 2 Analog inputs ( 0..5V)
- ❖ Dual-band GSM module for voice, data, SMS, email etc.
- ❖ Real Time Clock with battery backup
- ❖ 2 User defined LED indicators
- ❖ Supervision of supply voltage
- ❖ RS232 Serial port (110 bps to 115 Kbps)
- ❖ Standard SIM card reader
- ❖ Connection of GPS-Smartantenna via. standard RS232 (NMEA)
- ❖ 64 Kbyte storage for VPL programs
- ❖ Upto 3 Kbyte storage for user variables
- ❖ 64 Kbyte storage for constant data (strings etc.)
- ❖ 110 seconds storage for voicemessages
- ❖ Maximum of 128 seperate voicemessages
- ❖ 512 Kbyte memory for datalogging
- ❖ 16 simultaneous VPL jobs operating in one of two priorities
- ❖ Encapsulated in a compact black aluminium box.
- ❖ Advanced power-saving modes.

Analog inputs	Min		Max			
	0	-	+5	VDC	Resolution is 10 bits. All inputs are protected against transients and lowpass filtered.	
Digital inputs		Min	Typ	Max		
	Logic "High"	8	12	40	VDC	All inputs are protected against transients and lowpass filtered. All inputs are optically isolated
	Logic "Low"	-5	-	5	VDC	
Digital outputs (Solid state)		Min		Max		
		-	-	30	Volt	Outputs are protected against inductive loads and short circuits.
		-	-	0.5	Amp	
Power supply		Min	Typ	Max		
		8	-	34	VDC	
Unit Active with GSM/GPS off		80			mA	At 12 VDC supply voltage. .
Unit in Sleep with GSM/GPS off		20			mA	
Unit in Powerdown		0.9			mA	
Unit Active with GSM on		90	330		mA	
Unit Active with GPS on		160			mA	
Unit Active with GSM/GPS on.		170	420		mA	
Protection	IP54				The unit contains the following external connections: • SUB-D9F for connection of GPS-Smartantenna and for programming the unit. • SUB-D15M for power and digital and analog I/O. • SMA-Female for GSM antenna.	
External dimensions	W 120 x H 110 x D 30 mm					
Storage temperature	-40		+90	°C		
Operating temperature	-25		+55	°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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