

VERSION 01.0.18
DATE/09/04/2018



PT. KENDALI DAYA PRIMA

MUCONICS

REMOTE DATA LOGGER SYSTEM

PRESENTED BY: ENGINEERING DEPARTEMENT
PT KENDALI DAYA PRIMA
JAKARTA-INDONESIA

MUCONICS

The Micronics series data loggers are designed for remotely monitoring sensors and other instruments with 3G & satellite connection to a remote server for data logging and control. The series units are available with 0-10V, 4-20mA, digital state and pulse inputs, and digital outputs as well as serial ports for Modbus Master/Slave communications and connection of a satellite modem. Data is sent from the units to a remote server, where instrument of measurement device is placed and transmitting the value to the server using GSM networking. Our M2M interface allows this data to be published to a web interface accessible from anywhere in the world with user/password security and internet connection. The web interface provides both real time and historic data in table and graph format. SMS and email alerts can be generated for alarm conditions from the website, with SMS alarms also available directly from the units themselves.

SPECIFICATIONS

Component / Part	Specifications
Main processor unit	At mega 256A3, with clock standard basic speed 32 to 80 MHz. Non-volatile Program and Data Memories 64 KB, 256 KB of In-System Self-Programmable Flash. Advance
Peripheral Features	<p>Four-channel DMA Controller with support for external requests, Eight-channel Event System, Seven 16-bit Timer/Counter, Four Timer/Counters with 4 Output Compare or Input Capture channels, Three Timer/Counters with 2 Output Compare or Input Capture channels, High Resolution Extensions on all Timer/Counters, Advanced Waveform Extension on one Timer/Counter, Seven USARTs</p> <p>IrDA Extension on 1 USART, AES and DES Crypto Engine, Two Two-wire Interfaces with dual address match (I2C and SMBus compatible), Three SPI (Serial Peripheral Interfaces), 16-bit Real Time Counter with Separate Oscillator, Two Eight-channel, 12-bit, 2 Msps Analog to Digital Converters, One Two-channel, 12-bit, 1 Msps Digital to Analog Converter, Four Analog Comparators with Window compare function, External Interrupts on all General Purpose I/O pins, Programmable Watchdog Timer with Separate On-chip Ultra Low Power Oscillator</p>
Special Microcontroller Features	<p>Power-on Reset and Programmable Brown-out Detection, Internal and External Clock Options with PLL, Programmable Multi-level Interrupt Controller, Sleep Modes: Idle, Power-down, Standby, Power-save, Extended Standby, Advanced Programming, Test and Debugging Interfaces, JTAG (IEEE 1149.1 Compliant) Interface for test, debug and programming, PDI (Program and Debug Interface) for programming, test and debugging</p> <p>I/O and Packages, 50 Programmable I/O Lines, 64-lead TQFP, 64-pad QFN</p> <p>Operating Voltage 1.6 – 3.6V</p> <p>Speed performance, 0 – 12 MHz @ 1.6 – 3.6V or 0 – 32 MHz @ 2.7 – 3.6V</p> <p>32 GB Local storage, Standard SD Card</p>
Input / Output	<p>5 Discrete inputs and 4 Digital Outputs Included 2 default relay alarm, 2 Channel.</p> <p>2 Channel 4-20 Ma Analog Chanel 24 Bits Analog to Digital Converter</p> <p>1 Channel temperature measurement</p> <p>Bluetooth 4.0 BLE Interfacing complete with Androids remote control device or TCP/IP remote control device. This remote control device depend to the user requested.</p> <p>None back light display system</p>
Energy Storage	<p>Standard energy storage 10 Ampere Hours 12 Volts NiCad Battery Bank</p> <p>Low/High Charging rate solar energy complete with automatic solar charging controller</p> <p>Advance energy storage maximum 40 Ampere hour for power backup.</p>

Component / Part	Specifications
	Early warning system maintenance to avoid device failure caused by low energy supply.

PROGRAM FEATURE

Bluetooth remote data access,
Increase flexibility operation for maintenance,
Enable Remote data for setting alarm,
Enable Remote data for configuration analog input output
160 Character per SMS included spacing and special character

SCHEDULING

Scheduling program is the main function of the Muconics to arrange the frequency of data notification using SMS. To optimize the Battery bank power utilization. Scheduling program for Input data scanning, output data scanning, Messaging time

TRANSMISSION DATA SYSTEM

GSM/GPRS Voice / Fax / SMS and Data, Quad Band 850 / 900 / 1800 1900 MHz, Accepts Standard SIM Card , Can Be Used On Standard GSM Network , AT command set GSM 07.05 and 07.07 and WAVECOM
Standard GSM Antenna

POWER SUPPLY

(Option 1) Sun Energy converter complete with solar sell for 12 Volts 10 AH Battery bank,
(Option 2) 125 Volts DC power Source is available
(Option 3) 220 Volts AC power Source is also available.
Battery bank capacity 12V/10 Ah
Main Supply voltage units 12 Volts

MAINTENANCE

Early warning alarm detection, self-check and sending the notifications using SMS service

INDICATOR AND MAIN ELECTRONIC BOARD

LED Alarm, single and multi-color alarm system
Main board, MuconICs Rremdata Ver. 01.00.18

ENCLOSURE

IP 67