

DESCRIPTION

MTC-4000 is the most powerful and reliable modular PLC of our product range. Meets most needs and can be used as long simple automation as more demanding applications. Its design allows to be flexibly upgraded at any time.

CoDeSys (www.3s-software.com) has been used as development environment. Dutt is part of worldwide network partners. Nowadays, CoDeSys is the widespread IEC 61131-3 based development tool in Europe. Among many of its advantages is the possibility of combining up to five programming languages.



Summary of advantages:

- 32 bit core, floating point capable.
- 200MHz working frequency.
- Multitasking Real Time operating system.
- Virtual file system that simplifies the following things:
 - Automatically stores program and source code in the CPU.
 - Make backups of the CPU content.
 - Easy update of the CPU firmware
 - Remote connectivity with easy use through internet.
- Failure detection and historical alarm handler.
- IP addressing with switches or by software.

APPLICATION

MTC-4000 PLC has been specially designed to reduce cycle times and increase the quality of any industrial process. It has a modular architecture and designed for decentralized I/O remotes.

The configuration of all peripherals that make up the system is done easily and securely via communication bus.

MTC-4000 PLC has been designed specifically to command equipments like UPS, motor controls, wind power and solar equipments, handling machinery and parts manufacturing.

TECHNICAL SPECIFICATIONS

CPU	
<ul style="list-style-type: none"> ▪ 32 bits floating point capable ▪ 200MHz ▪ Europe size card ▪ Updatable Firmware 	
<ul style="list-style-type: none"> ▪ Operation status switch: RUN, STOP, RESET ▪ General purpose RS422 port ▪ Two Ethernet port with PC 100/10 RJ45. TCP/IP Protocol. ▪ CPU operation status indicator through led array. ▪ IP addressing with internal switches or by software. 	
Processing timings	
<ul style="list-style-type: none"> ▪ Bit operations 25 ns ▪ Word operations 30 ns ▪ Integer arithmetics 30 ns ▪ Floating point arithmetics 500 ns 	
Memory	
<ul style="list-style-type: none"> ▪ Internal Flash 14MB ▪ RAM DDR 4MB ▪ Magnetoresistive memory NVRAM Retention area 512KB 	
Timers / Counters	
<ul style="list-style-type: none"> ▪ Ilimited, each timer or counter is abstracted by program ▪ Minimum Timing 1ms ▪ Maximum Timing 49d17h2m47s295ms ▪ Programable retention ▪ Real Time Clock (RTC) 	
Interrupts	
<ul style="list-style-type: none"> ▪ 3 event handled interrupts / 2 BUS interrupt ▪ Ciclic: Period set in miliseconds ▪ Software event: any global variable ▪ Precision clocks..... 500ms, 100ms, 50ms 10ms, 5ms, 2ms, 1ms 750µs, 500µs, 125µs ▪ External BUS event 	
I/O Remotes	
<ul style="list-style-type: none"> ▪ Digital Channels: without preestablished limit ▪ Analog Channels:..... without preestablished limit ▪ BUS addressing up to 12 cards(16KBx12) 	
Racks	
<ul style="list-style-type: none"> ▪ Ultrarapid Medium size combined bus (2+5) MTC-4009 ▪ Ultrarapid Large size combined bus (2+12)..... MTC-4010 	
Other peripherals	
<ul style="list-style-type: none"> ▪ Motor controller MTC-4031 ▪ Interrupts and fast counter card MTC-4002 ▪ Comunication card: 2xCAN; 1xRS485; 1xProfibus MTC-4014 ▪ 5V/60W Power supply MTC-4004 ▪ 5V/100W Power supply..... MTC-4013 	