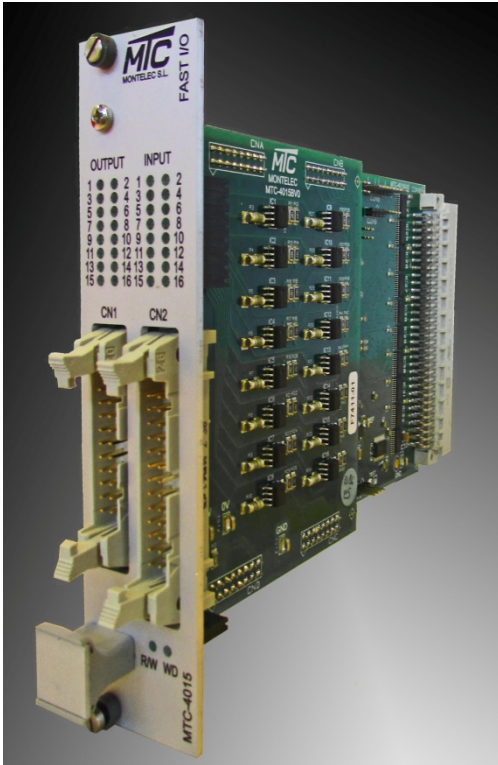


DESCRIPTION



The MTC-4015 card is a configurable fast counters and interrupts card, as well as general purpose inputs and outputs. These counters can be used in both simple applications and complex real-time controls.

It is a versatile programmable logic card. It has a group of generic meters and other more specific ones that cover a wide range of applications, even so they can be oriented for specific applications at the customer's request.

This card can be used to complement the control in one or more MTC-4031 through the bus. This is very useful in applications that require tight controls for position, speed, or shift registers.

Several cards can be connected to the same rack.

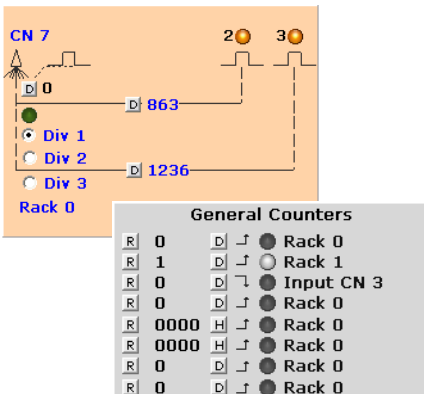
Its configuration is carried out in a simple and intuitive way using graphic software. Access to the counters and fast I / O is done from the CoDeSys programming environment (www.3s-software.com) using function blocks.

Summary of benefits:

- **Group of 16 counters for shift registers**
- **Counter with 16 latched registers**
- **Counter with tracking and an output**
- **Counter with follow-ups and double output**
- **1bit shift register with 4 delayed outputs**
- **16 interrupt sources**

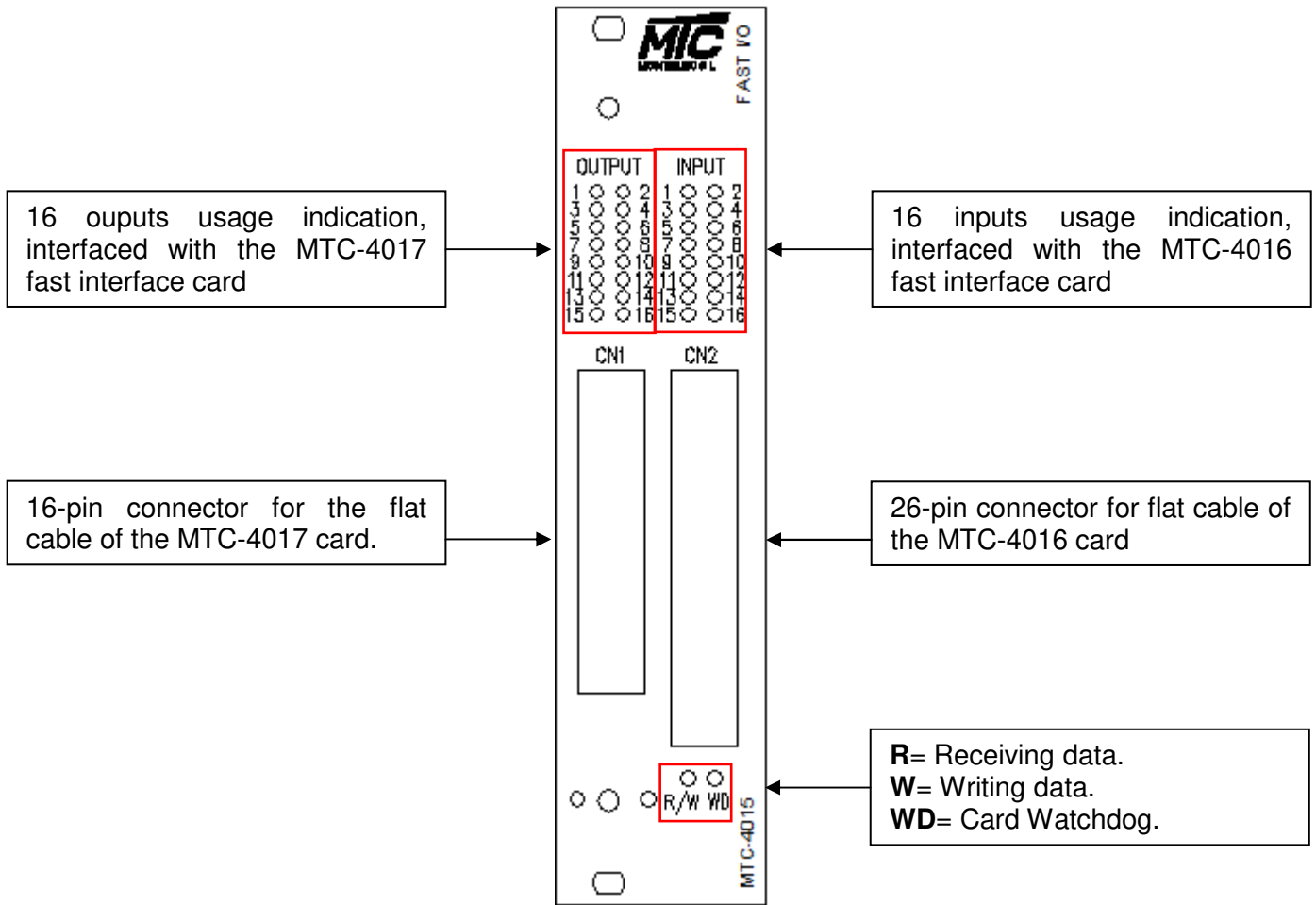
APP

The **MTC-4015**, It is mainly used in applications that require precision in signal counting and a fast response to the command in real time. It is worth noting the flexibility and ease of configuration. These are some of its applications:

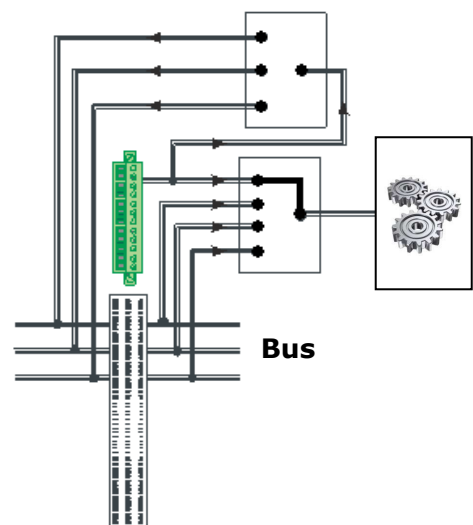


- Incremental / decremental counts
- Rotational speed and frequency measurements
- Generating interrupts to the MTC-4000 or Dutt-5000 CPU
- Signal tracking
- Shift records
- Control of motors in speed and position loops
- Systems synchronization
- Signal delay
- Period measurement

DESCRIPTION OF THE FRONT ELEMENTS



For information regarding the MTC-4016 and MTC-4017 interface board refer to the manual:
 "MTC-4016 Fast Inputs Interface"
 "MTC-4017 Fast outputs interface"



TECHNICAL SPECIFICATIONS

Format
<ul style="list-style-type: none"> Europe format card
Precision
<ul style="list-style-type: none"> High speed internal oscillator80MHz
Frontal
<ul style="list-style-type: none"> 1 flat cable connector 26 wires (<i>interface card MTC-4016 Fast inputs</i>) 1 flat cable connector 16 wires (<i>interface card MTC-4017 Fast outputs</i>) Status LEDs, I / O 16 inputs + 16 outputs 3 LEDs status, transmission, reception and WD.
Inputs
<ul style="list-style-type: none"> Inputs type: opto-coupled (24V) Quantity 16 (via interface) Max operating frequency 150 KHz Way of the inputs interface board MTC-4016
Outputs
<ul style="list-style-type: none"> Output type: opto-coupled (24V) Quantity 16 (via interface) Way of the outputs interface board MTC-4017
Interruptions
<ul style="list-style-type: none"> Number of sources 16 Generation origin 4 hardware interrupts (BUS1 / BUS2) on CoDeSys Flank upward \uparrow / descending \downarrow Registration of masks for enablement Jump record using flags
Communication between cards
<ul style="list-style-type: none"> Signal handling between MTC-4015two dual I / O channels MTC-4031 encoder signal handling 3 configurable triple channels
Accountants
<ul style="list-style-type: none"> Group of 8 counters for shift registers 1 channel / 16bits Counter with 8 latched registers 1 channel / 32bits Counter for photocell and tracking with double output
<ul style="list-style-type: none"> Sensor tracking counter <ul style="list-style-type: none"> → Clock Origin: configurable → Origin of entry: configurable
<ul style="list-style-type: none"> Counter for sensor position control <ul style="list-style-type: none"> → 1 self-addressing counter X4 16 bit → 1 self-addressing counter X4 32 bit → 2 inputs and 2 associated records
Shift register
<ul style="list-style-type: none"> Record resolution1 bit Input source: 16 external inputs (configurable) Number of outputs: 16 Registry Clock: divisible X1 or X2 (<i>configurable</i>) Maximum delay: 65536 steps
Filters
<ul style="list-style-type: none"> Configurable by program for all elements16 filters f_{max} filter (watches): 1.25MHz f_{min} filter (watches): 38.1469Hz Minimum filter pulse width (I / O and INT) 400ns Maximum filter pulse width (I / O and INT) 13.1072ms