

# VAS CORPORATION










## ETHERCAT MASTER ROBOT CONTROLLER

### INTRODUCTION

EtherCAT Master Robot Controller is a high performance , reliable and easy-to-use robot controller with Teach Pendant. The controller is equipped with real-time operating system that supports various EtherCAT slave devices. Robot Controller can easily be used for various robot types (such as SCARA, Linear Delta, Delta, Cartesian, Articulated and Custom Robot) with the similar robot language supported by ABB, YASKAWA, FANUC ,...



### FEATURES

-  Real-time and high-speed synchronization system.
-  Support special motion functions: continuous move and override.
-  Support many robot types: SCARA, Linear Delta, Delta, Cartesian, Articulated and Custom Robot in the same GUI.
-  Support various EtherCAT slaves.
-  Support up to four tasks.
-  Built-in compiler for various robot language functions: robot motion, setting, I/O, function, structure, operation, variable.
-  Support simulation feature.
-  Interface with external devices via TCP/IP protocol.
-  Easy to operate and monitor robot with touch screen on Teach Pendant.

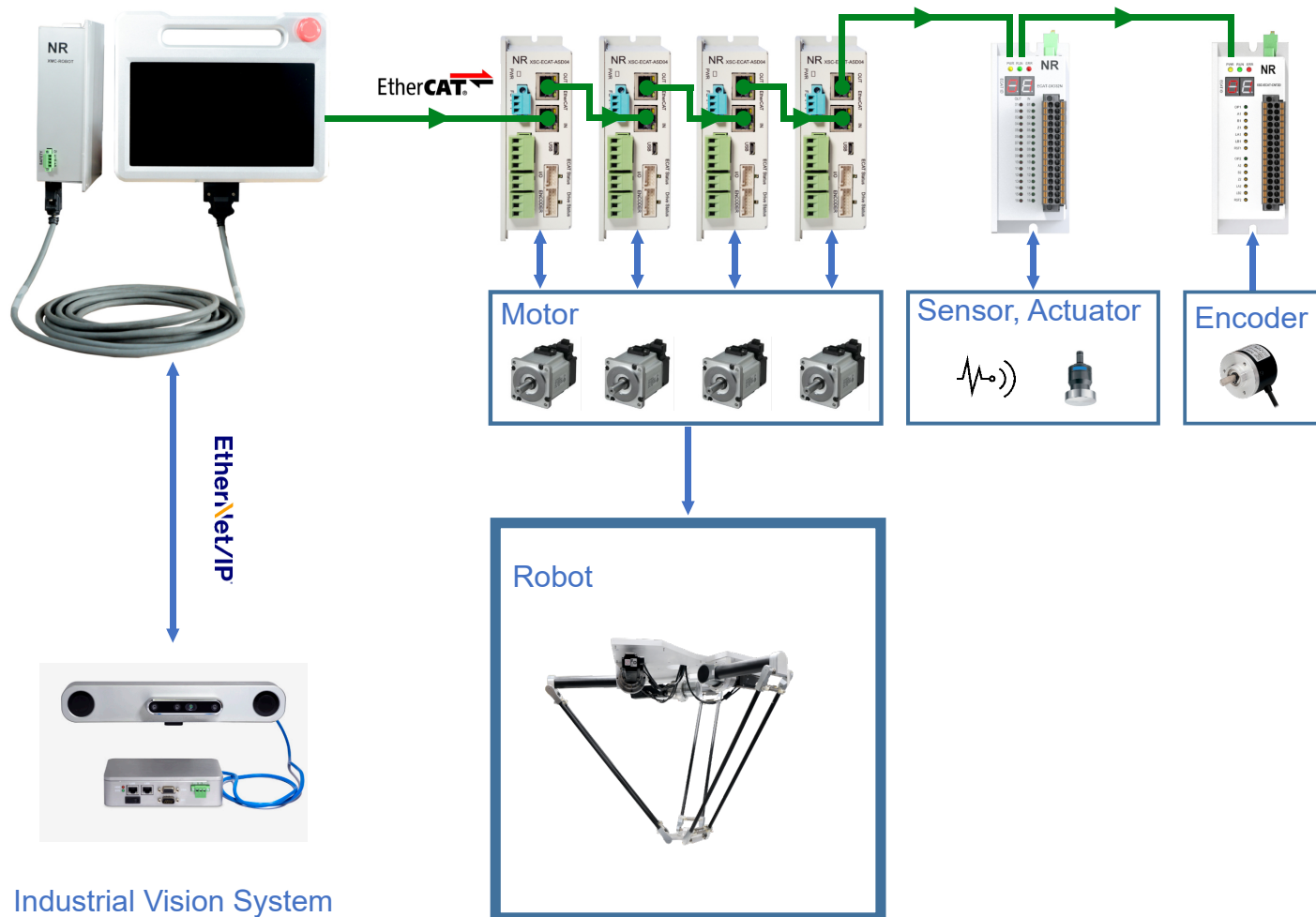
# SIMPLE HARDWARE CONNECTION

EtherCAT Master Robot Controller

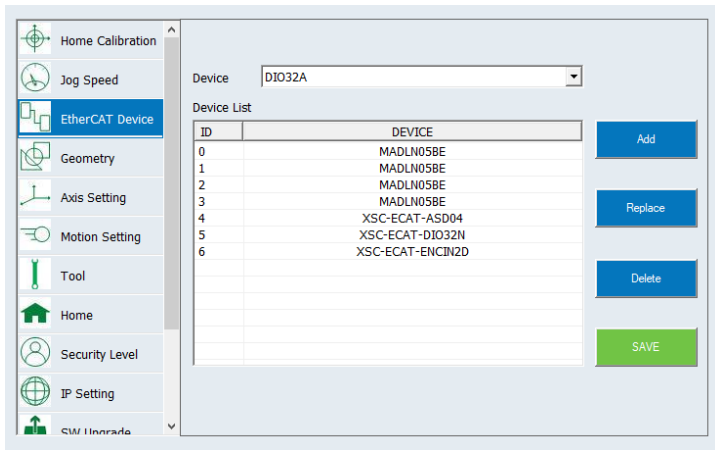
AC Servo Driver

Digital Input/Output

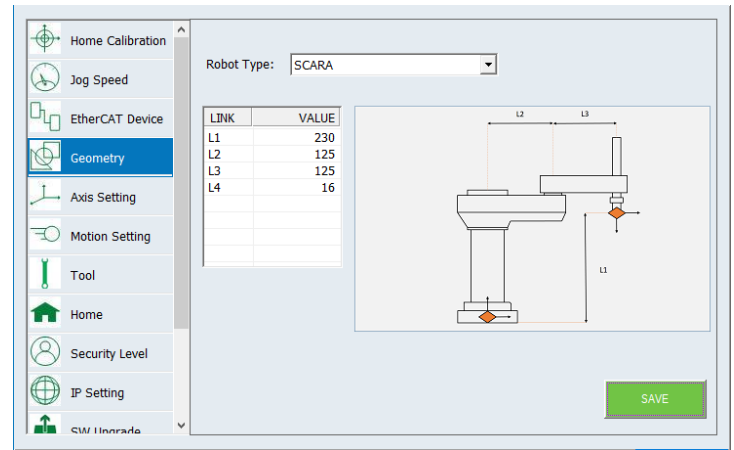
Counter



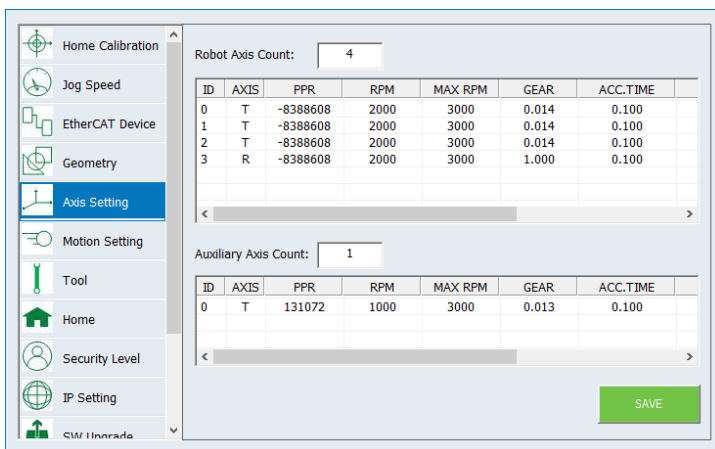
# SIMPLE SOFTWARE SETTING



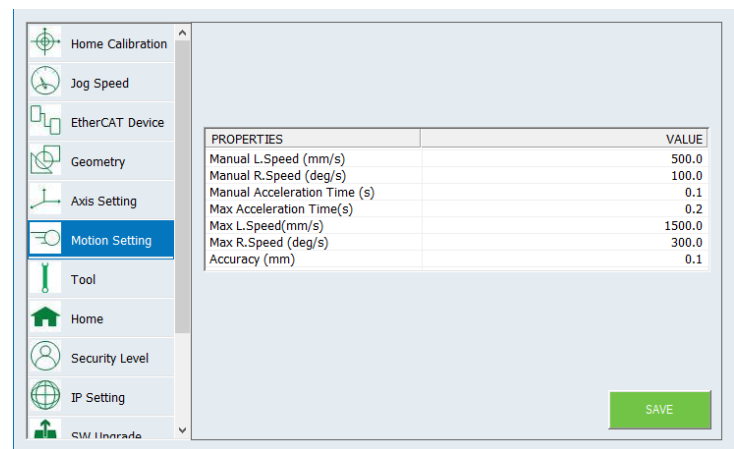
EtherCAT Device Setting



Robot Type & Dimension

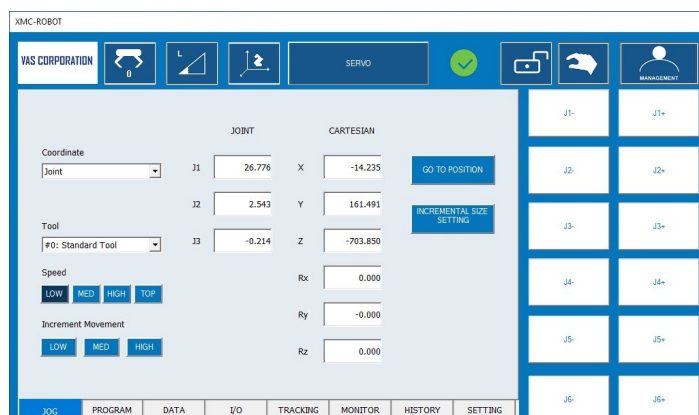


Axis Setting

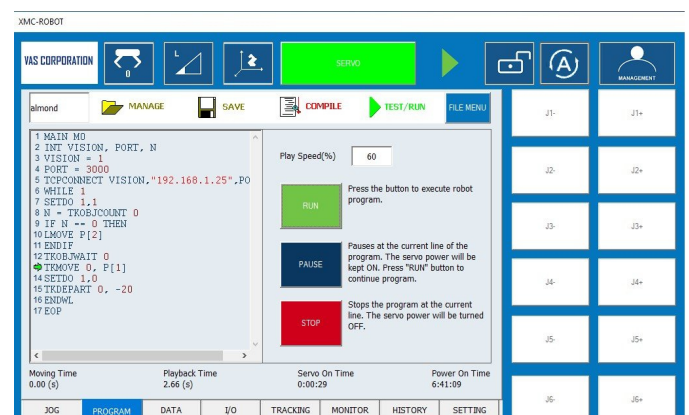


Motion Setting

# SIMPLE SOFTWARE OPERATION



Jog



Program

# SPECIFICATIONS

## HARDWARE

Control Unit	
CPU	Intel Celeron J4105 Quad-Core, 1.5Ghz
RAM	8 GB
Storage	64GB eMMC
OS	Windows 10
Real-time OS	On Time RTOS32
Communication	EtherCAT (Master) x Ethernet (Master, Client) x 1
External Storage	USB 3.0 x 1
Cooling Method	Ambient
Dimension	200mm (W) x 64mm (H) x 150mm (D)
Weight	800 g (Max.without cable)

Teach Pendant	
Display type	10.1" IPS TFT LCD (LED backlight)
Resolution	1024 x 600
Touch Type	Capacitive
Controller	USB Interface
Switch	Emergency Stop x 1
Dimension	300mm (W) x 240mm (H) x 60mm (D)
Weight	1.600 g (Max.without cable)
Power	
Power Input	+ 12 VDC, 2 A
Connection Cable	
36-pin Female connector: C36-2TS.3M10336	


## SOFTWARE

Controller	
EtherCAT Interface	CoE (CANopen over EtherCAT) support slave device
EtherNet/IP	TCP/IP protocol
User Interface	Color GUI with touch
Robot kinematics	SCARA, Linear Delta, Delta, Cartesian, Articulated and Custom Robot
Safety features	
Lock	Lock/Unlock controller
Application	
Special function	Conveyor Tracking, Vision

Robot functions & language	
Operation mode	Teach/Automatic
Coordinate system	Joint, Base, Tool, User
Speed Setting	Percentage (%)
Multi-task	Up to 4 tasks
Continuous move	o
I/O command	Digital, Analog
Program control	If, Do, While, For, Goto, Call
Variable/Array	o
Jog	Continuous/Step
Program Editor	Copy, Paste, Cut, Undo, Redo
Debug feature	LinebyLine mode StepbyStep mode


## VAS CORPORATION

A leading manufacturer of Robot and Motion Control System technologies

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