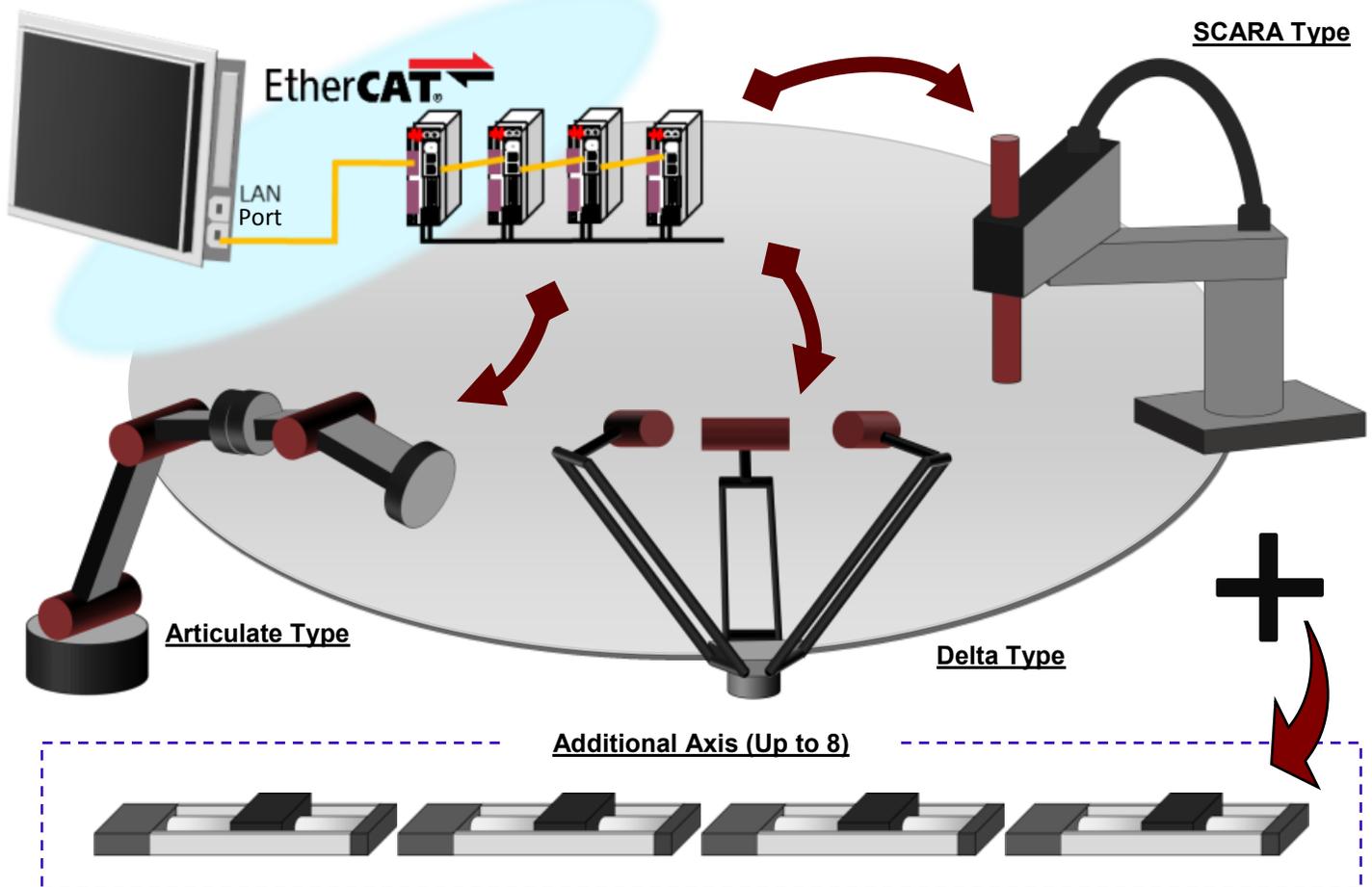


RMX

Quick launch & Setup, Minimal Cost PC-based Robot Controller
Multiple Robots + 8 Additional Axis, Ultra-Precision Synchronous Control



- ◆ Simultaneously control multiple robots with single PC
- ◆ Supports various typical mechanisms of industrial robots. Includes irregular mechanisms such as closed-link, individual-axis link offset
- ◆ Simultaneously control up to 8 additional axes per robot
- ◆ Our flexible and simple robot language makes programming complex operations easy. Interact with peripheral devices such as I/O and cameras.
- ◆ Achieve smooth and safe manual operation without worrying about singularity (SCARA type)
- ◆ Customizable Windows GUI and connect with other Windows applications (API)
- ◆ Using browser GUI, remote control from any device

GUI

Parameter settings

- **Mechanism Setting:** mechanism type, link length, link offset, additional axes etc.
- **Motor setting:** encoder resolution, gear ratio, etc.
- **Operation:** tip velocity, each axis velocity, in-position width, acceleration and deceleration profile selection, etc.
- **Limit:** hard limit, soft limit
- **Home:** homing velocity, home devices, etc.
- **Safety:** Emergency stop operation, interlock devices, etc.

Status Display

Tip position, orientation, velocity, position of each axis, the motor travel distance

Operation (manual operation / automatic operation)

Homing, jog, inching, positioning, teaching playback, robot language execution, I/O control and monitor

Teaching

Create a file of data points that you want to move the robot tip

Log acquisition

Logging of each axis and tip position coordinates every 1ms during operation (up to 10 sec)



Robot Language RBC

Robot language "RBC" is a simple structured language for RMX. You can execute various complex robot operations with our simple language RBC such as linear motion, circular motion, PTP operation, reading teaching files, interaction with I/O devices, interacting Windows app through the external variables.

<Programming Sample>

```

LoadPoints("Teach01.csv");
Speed(400);
Accel(4500);
SpeedR(5);
AccelR(5);

for(i=1;i<100;i++)
{
    Trans(point[1]);
    a = ReadBit(3,2,0);
    if(a == 1){
        Wait(1000);
    }
}
    
```

Command Function

Command	Function
Trans	PTP operation to a point
TTrans	PTP operation to a point with tool coordinate system
Move	Linear interpolation (CP operation) to a point
TMove	Linear interpolation to a point with tool coordinate system
Arc	Circular interpolation (CP operation) via current position, passing points, target point
Drive	Move (PTP operation) each joint specified amount (mm or deg)
SpeedR	Specify the velocity of the PTP operation as a percentage of the set value
AccelR	Specify the acceleration and deceleration of the PTP operation as a percentage of the set value
Speed	Set speed of CP operation (mm / s)
Accel	Set the acceleration and deceleration of CP operation (mm / s ^ 2)
Home	Homing of the specified axis (PTP operation)
PM	Set the path motion

RMX Operating Environment / Application Development Environment

OS	Windows 7 32bit
CPU / RAM	CPU: Intel®Atom™E3845 and above / RAM: 2GB and above
Compatible NIC	Over 30 types of NIC have been tested. Refer our website http://www.softservo.com/data_sheets/EtherCAT_NIC.pdf



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