



Idec

Micro³, MicroSmart & OpenNet

Overview

Maple Systems' **Silver Series** Operator Interface Terminals (Maple OITs) communicate with Idec Micro³, MicroSmart and OpenNet Series PLCs using the Expansion Link, Data Link and Computer Link (1:1) protocols. When configured with EZware-500, the Maple OIT is the master in a point-to-point single master, single slave format. Please refer to the *Silver Series Installation and Operation Manual* for information on connecting multiple Maple OITs to a single PLC port.

Compatible PLCs	
Family	Model
Micro ³ Series	Micro ³ (10-48 I/O), Micro ³ C (16-48 I/O)
OpenNet Series	FC3A-CP2K, FC3A-CP2KM, FC3A-CP2S, FC3A-CP2SM
MicroSmart	All-in-one (FC4A-C10R2/C16R2/C24R2) Slim (FC4A-D20K3/D20S3/D20RKI1/D20RS1/D40K3/D4053)

Communications Cable

The Maple OIT should be connected to the programming port located on the front of the Base/Master PLC.

A list of communications cables offered by Maple Systems as well as cable assembly instructions to assist you in assembling your own communications cable are available on our website.

WARNING: If your communications cable is not wired exactly as shown in our cable assembly instructions, damage to the OIT or loss of communications can result.

Accessible PLC Memory

Register Memory

The following table lists the PLC's register memory ranges that the Maple OITs are able to access. Please note that your PLC's memory range may be

smaller or *larger* than that supported by these OITs. The following register memory can be displayed in 16, 32, or 64 bit format on the Maple OIT.

PLC Register Type	Address Range	Format	PLC Register Description
RC	0-9999	dddd (d=decimal)	Counter Elapsed Time
RT	0-9999	dddd	Timer Elapsed Time
D	0-9999	dddd	Data Memory Registers

Discrete Memory

The following table lists the PLC’s discrete memory ranges that the Maple OITs are able to access. Please note that your PLC’s memory range may be *smaller* or *larger* than that supported by these OITs. The following discrete memory is displayable in single-bit format on the Maple OIT

PLC Bit Type	Address Range	Format	PLC Bit Description
X	0.0 to 2047.7	dddd.o (d=decimal, o=octal)	Input Bits
Y	0.0 to 2047.7	dddd.o	Output Bits
M	0.0 to 2047.7	dddd.o	Internal Bits

Memory Not Supported

The following PLC memory areas are not currently supported by the Maple OITs:

- L (Link Registers)
- R (Shift Registers)
- U (High Speed Counter Registers)
- W (Clock/Calendar Registers)

Important Memory Considerations

If your PLC’s memory range is smaller than the range supported by the Maple OITs, it is possible to configure the OIT to monitor a PLC memory address which does not exist. Since this can cause unpredictable results, when you configure the OIT please ensure that all selected PLC memory addresses are valid for your PLC model.

Do not configure the OIT to write to any PLC memory address which should only be written to by the PLC.

EZware Settings

The following table lists the communications settings that must be configured in EZware. These settings can be found in the Edit-Set System Parameters menu under the PLC tab. Please note:

- the **Recommended Settings** column provides the recommended setting based upon the default settings most commonly used in the Idec Micro³ PLC
- the **Options** column lists EZware's options; your PLC may not support every option

Name	Recommended Settings	Options	Important Notes
PLC type:	Idec Micro ³ and OpenNet		
Serial port I/F:	RS485	RS232, RS485	
Data Bits:	7	7 or 8	Must match the PLC's port setting.
Stop Bits:	1	1 or 2	Must match the PLC's port setting.
Baud Rate:	9600	9600,19200, 38400,57600, 115200	Must match the PLC's port setting. Use the fastest baud rate supported by the PLC.
Parity:	Even	Even, Odd, None	Must match the PLC's port setting.
HMI station No.:	0	0-255	Does not apply to this protocol.
PLC station No.:	255	0-255	Must match the IDEC programming port settings.
Multiple HMI:	Disable	Disable, Master, Slave	use for multiple OITs
HMI-HMI link speed:	38400	38400, 115200	use for multiple OITs
PLC time out constant (sec)	3.0	1.5 to 5.0	adjust if longer timeout is required
PLC block pack:	0	0-10	see <i>Silver Series Installation and Operation Manual</i>