



Omron

SYSMAC C, CPM & CQM Series

Overview

Maple Systems' **BLU300 Series** Operator Interface Terminals (Maple OITs) communicate with Omron C, CPM & CQM Series PLCs using the Host Link protocol. When configured with Blue Leaf Configuration Software, the Maple OIT is the master in a point-to-point single master, single slave format.

Compatible PLCs	
Family	Model
SYSMAC C-Series	C200H Plus, C200H, C200HW, C60K, C40K/H, C28K/H, C20K/H
CQMx Series	CQM1, (Excludes CQM1H w/CPU51/61)
CPMx Series	CPM1, CPM1H, CPM2x

Communications Cable

The Maple OIT should be connected to the PLC's Host Link port.

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 at www.maple-systems.com/cables.htm.

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.

PLC Settings

The host link port may be built into the PLC or connected as an additional plug-in module.
The Net. Addr. Of all objects need to match the PLC's HostLink unit (node) number.
The PLC must be placed in Monitor mode.

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, or 32 bit format on the Maple OIT.

PLC Register Type	Address Range	Format ¹	PLC Register Description
DM	0-511	ddd	Data Memory Registers
TCS	0-511	ddd	Timer/Counter Current Values
PV	0-511	ddd	Timer/Counter Preset Values
LR	0-63	dd	Link Relay Registers
HR	0-99	dd	Holding Relay Registers
AR	0-27	dd	Auxiliary Relay Registers
IR	0-511	ddd	Internal Relay 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 ¹	PLC Register Description
DM	0.0 - 511.15	ddd.bb	Data Memory Registers
TCS	0.0 - 511.15	ddd.bb	Timer/Counter Current Values
PV	0.0 - 511.15	ddd.bb	Timer/Counter Preset Values
LR	0.0 - 63.15	dd.bb	Link Relay Registers
HR	0.0 - 99.15	dd.bb	Holding Relay Registers
AR	0.0 - 27.15	dd.bb	Auxiliary Relay Registers
IR	0.0 - 511.15	ddd.bb	Internal Relay Registers

1. (Format: d= decimal, b = bit)

Important PLC 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.

Blue Leaf Communication Settings

The following table lists the communications settings that must be configured in Blue Leaf Software. These settings can be found in the “Tools->HMI-PLC Comm. Settings” menu. Please note:

- the **Recommended Settings** column provides the recommended setting based upon the default settings most commonly used in the Omron C-series PLCs
- the **Options** column lists Blue Leaf’s options; your PLC may not support every option

Name	Recommended Settings	Options	Important Notes
PLC type:	Omron C-Series		
Com Port:	RS232	RS232, RS485 (2-wire only)	Tools->Set HMI-PLC Port .
Baud Rate:	9600	4800, 9600, 19200, 38400, 57600, 115200	Must match the PLC’s port setting. Use the fastest baud rate supported by the PLC.
Data Bits:	7	7 or 8	Must match the PLC’s port setting.
Parity:	Even	Even, Odd, None	Must match the PLC’s port setting.
Stop Bits:	2	1 or 2	Must match the PLC’s port setting.
Net Addr.:	1	0-255	Must match the PLC’s Host-Link port setting. (Configure in each object attribute).