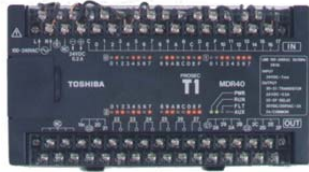


## T1-40S PLC Migration

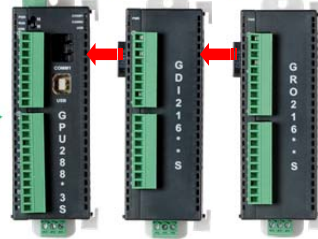
To **V200 Series PLC**

**T1 40S PLC**  
(TDR116S6S)



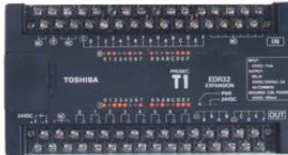
↓ Inputs 24 Vdc  
↓ Outputs Relay  
Outputs Transistor

**V200, CPU + GDI216\*\*S & GRO216\*\*S I/O Modules**



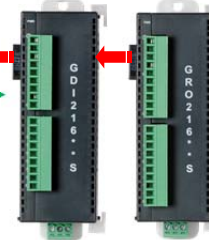
24 Inputs 24 Vdc 24  
Outputs Relay  
2 Outputs Transistor

**T1 40E PLC Expansion**



24 Inputs 24 Vdc  
16 Outputs Relay

**V200 Exp I/O**



24 Inputs 24 Vdc  
16 Outputs Relay

	<u>T1 Series</u>	<u>V200 Series</u>
Programming Cable	Serial	USB Printer Cable
Programming Software	T-PDS	<sup>1</sup> OIL-DS
Instruction Set	T-Series	T-Series
Execution Speed	Contact-4 μs Coil-2.3 μs Add-6.5 μs	Contact-1 μs Coil-1.1 μs Add-3.3 μs
Networking	Toshiba ASCII ASD Limited	<sup>2</sup> Modbus Master/RTU ASD Full
Form Factor	Brick w/ Clip-on Modules	Modular w/Clip-on Modules
Power Supply	120 Vac	24 Vdc
Power Required	≤ 45 VA	≤ <sup>3</sup> 8 VA
Approvals	CE, cUL	CE, cUL
Weight CPU	800 g	180 g
I/O Module		80 g each

**Was an Inexpensive OIS used with the T1-40?**



Replace with



- Notes: 1. The T-PDS software and the OIL-DS software are very similar. Both use the T-Series instruction set.  
 2. A Modbus Ethernet TCP/IP CPU module is also available (GPU200\*3S).  
 3. I/O modules also require a 24 Vdc power source.  
 4. T1-40S PLCs also migrate to the V200 Series.

## Instruction Set

Like the T1 Series, Toshiba's V200 Series PLCs are small type controllers suitable for both simple relay replacement and complex control applications. The instruction set includes:

◆ Double Length Math	◆ Indirect Addressing	◆ PID
◆ Floating Point Math	◆ For-Next Loops	◆ Comparisons
◆ Filters, Avgs, & Limits	◆ Subroutine Call	◆ Step Sequencer
◆ Conv; Hex↔Bin↔ASCII	◆ Logic Operations	◆ Interrupt Enable
◆ Function Generator	◆ Jump	◆ Log/AntiLog

## PLC Order Numbers

TIC_NO	DESCRIPTION
<b>CPUs</b>	
GPU288*3S	V200 CPU, 8 Inputs 24 Vdc, 2 Outputs 24 Vdc Transistor, 6 Outputs Relay, Requires 24 Vdc PS.
GPU200*3S	V200 CPU, Ethernet & USB Port, Requires 24 Vdc PS.
<b>I/O Modules</b>	
GDI216**S	16 Inputs, 24 Vdc, 8p/com, sink/source
GDR288**S	8 Inputs, 24 Vdc. 4p/com, 8 Outputs Relay, 4p/com
GDD288P*S	8 Inputs, 24 Vdc. 4p/com, 8 Outputs PNP, 4p/com
GDD288*S	8 Inputs, 24 Vdc. 4p/com, 8 Outputs NPN, 4p/com
GRO216**S	16 Outputs Relay, 8p/com
GDO216P*S	16 Outputs, 24 Vdc Transistor, 8p/com, PNP
GDO216*S	16 Outputs, 24 Vdc Transistor, 8p/com, NPN
GAD208L*S	8 Analog Inputs, 4-20 mA, 0-10 Vdc (12 bit)
GAA242**S	4 Analog Selectable Inputs, 4-20 ma, 0-10 Vdc, 0-50/100 mV, RTD, TC -- 2 Analog Outputs, 4-20 mA, 0-10 Vdc.
GDA204**S	4 Analog Outputs, 4-20 ma, 0-10 Vdc.

- Notes: 1. More analog and communications modules under development.  
2. See OIS PLUS flyer for OIS PLUS part numbers.

**PLCs ADJUSTABLE SPEED DRIVES MOTORS CONTROLS UPS INSTRUMENTATION**

# TOSHIBA

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