#### PROGRAMMABLE LOGIC CONTROLLERS

# **Communications Interface Module**



The GCF612 is a multi function serial communications module for the V2000 Series S2T PLC. It communicates directly with the S2T CPU via the station bus. The GCF612 has three modes of operation:

- > Computer Link Mode
- > Free ASCII Mode
- ➤ Data Storage Mode

All three modes can be used simultaneously.

Computer Link Mode: This mode allows multiple V2000 S2T CPUs to be connected to higher level controller (master computer, MMI/OIS, or the T-PDS programming software. Up to 32 stations can be connected without a repeater.

**Free ASCII Mode**: This mode allows the GCF612 to act as a master device. In this mode the GCF612 can send Read & Write commands to connected devices that have a simple ASCII communications protocol. These devices include ASDs (adjustable speed drives), weigh scales, motor protection relays, etc.

**Data Storage Mode:** This mode allows the GCF612 to store large quantities of easily accessed data outside of the CPU and the GCF612. The GCF612 has a slot for a standard, off-the shelf, commercial compact flash card (above). Currently GCF612 can accept flash memory cards in the capacity of 32 Mb to 1 Gb. Approximately 5 million PLC registers can be saved to each 32 Mb on the compact flash card. Data, with a date and time stamp, can be saved to a CSV (comma separated value) in the compact flash card. Most spreadsheet and database programs can read CSV files. Once this data is imported in a program such as MS Excel all types of data manipulation, graphing, statistical analysis, etc. is possible. This data can be used for process improvement or proof of system status during litigation.

For more information on Toshiba PLCs please visit <a href="www.toshiba.com/ind">www.toshiba.com/ind</a> and click on PLCs.

# **GCF612 Module Specifications**

## **Functional Specifications**

Item		Specification	
Compatible CPU		S2T Ver. 1.3 or higher	
I/O Type		Opt Station bus module)	
Indicators		Run/Error status, Card status,	
		TX1,TX2, RX1, RX2 status.	
Data	Medium	Compact Flash	
Storage	Max Capacity	1 Gb	
	Type	FAT file system (FAT16)	
	File Format	CSV/Binary file	
RAS		WDT, Self-Diagnosis, Trans Error	

### **Communications Specifications**

Item		CH 1	CH 2
Interface		RS232	RS485
Cable Connection		9 pin D-Sub	6 pin Terminal Strip
Transmission Distance		Up to15 m	Up to 1 Km
Synchronizing		Asynchronous	Asynchronous
Transmission Mode		Full Duplex	Full Duplex 4 wire
			Half Duplex 2 wire
Message Length		Up to 1024 K bytes	Up to 1024 K bytes
Transmission Control		RS/CS Control	None
Configuration		1 Unit	21 Units Max.
Transmission Speed (bps)		300, 600, 1200, 2400, 4800, 9600, 14,400,	
		19,200, 28,800, 38,400, 57,600, 115,200	
Frame	Start Bit	1 (fixed)	
Format	Data Bit	7/8 bits	
	Parity Bit	Even/odd/none	
	Stop Bit	1 or 2 bits	
Connection Type		1:1	1:1, 1:n (n=1 to 32)
Code Pattern		NRZ	
Protocol		Toshiba Computer Link & Free ASCII	

ADJUSTABLE SPEED DRIVES MOTORS CONTROLS UPS INSTRUMENTATION PLC



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