F4-SDN Module

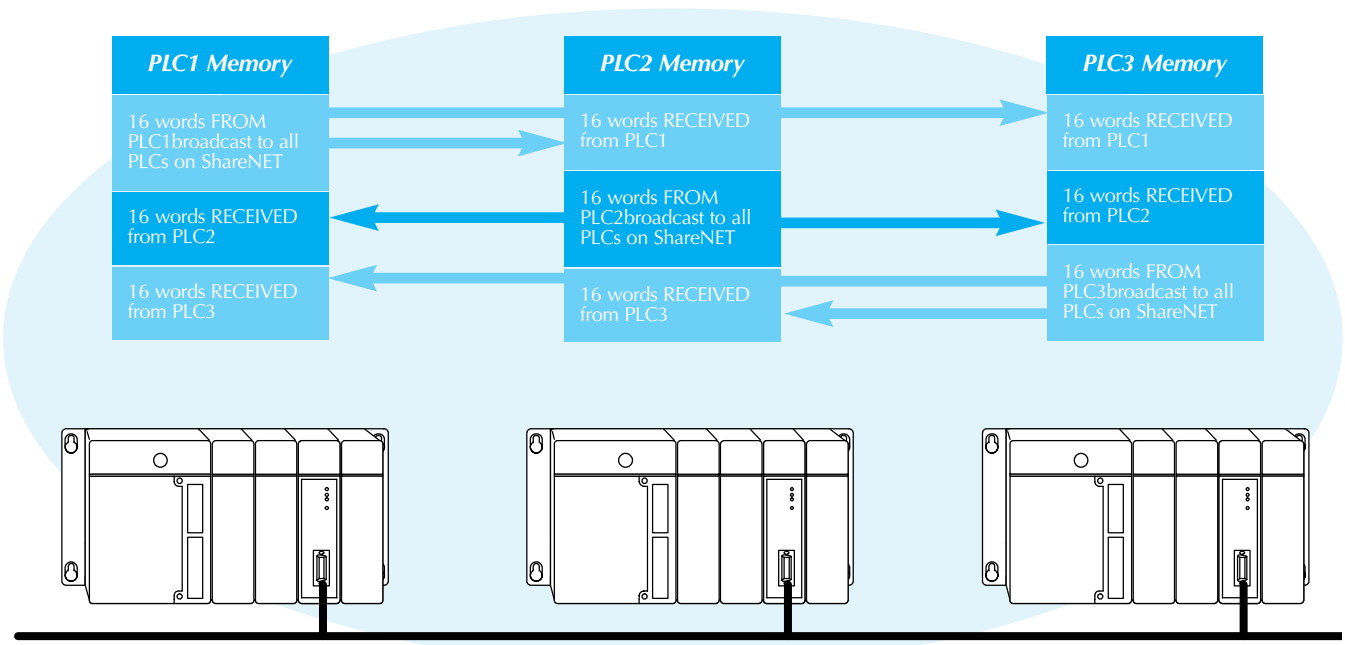
The Shared Data Network CoProcessor, F4-SDN, is used to share data at high speeds between a maximum of 16 DL405 CPUs. A Shared Data Network CoProcessor (SDN) is installed in each PLC rack on the shared data network.

Each F4-SDN on the shared data network constantly sends a block of data from its DL405 CPU to every other SDN on the network. Each SDN takes the data received from the network and writes the data to a block of V-Memory in its own DL405 CPU. The address of the module sending the data determines where in V-Memory the data is placed.

This network is useful in applications where multiple independent DL405 CPUs control different parts of the same process. The Shared Data Network allows each DL405 CPU on the network to know, in real time, what every other DL405 CPU on the network is doing.

Specifications	
Module Type	CoProcessor, Intelligent
Modules per CPU	Two maximum, must be in CPU Base
Communication	RS485 @ 250K Baud, CRC16 error detection
Recommended Cable	Belden 9841 or equivalent
Maximum Distance	4000 ft. (1219m) between extreme ends of the network
Modules per Network	16 (Address is user selectable)
Maximum Number of V-Memory Locations Broadcast to the network per F4-SDN	16 (32 Bytes), user-selectable from 1 to 32 bytes
Maximum Number of V-Memory Locations Received from the network per F4-SDN	256 (512 Bytes), up to 32 bytes may be received from each active F4-SDN
Impact on PLC Scan Time	Adds 4 to 28 ms
Field Wiring Connector	9-pin D-sub
Internal Power Consumption	235 mA maximum at 5VDC (supplied by base power supply)
Operating Environment	0°C to 60°C (32°F to 140°F), 5% to 95% humidity (non-condensing)
Manufacturer	FACTS Engineering

ShareNET



This example uses 48 Shared Words of Data Between 3 PLCs