

MCP-T

Motorola Communication Processor for TCP/IP

The MCP-T is the bridge element between a MOSCAD radio-based Wide Area Network (WAN) and the computer system's Local Area Network (LAN).



FEATURES

TCP/IP

Ethernet and TCP/IP is the communication medium and protocol commonly used in a computer Local Area Network (LAN). The LAN provides connectivity among multiple users performing simultaneously the many different tasks required by large computer-system users. The Motorola Communication Processor for TCP/IP provides an Ethernet and TCP/IP connection into the LAN for data from MOSCAD field RTUs.

◆ *The core computer system, with all features intact, may directly utilize field data in their billing, customer service, dispatch and other operational activities.*

MDLC Protocol

MDLC is the seven layer protocol used by MOSCAD that conforms to the ISO recommendation for Open System Interconnection (OSI). It is designed for on-radio use and allows multiple logical communication channels per communication medium thereby making possible simultaneous Host-to-RTU, RTU-to-Host, and RTU-to-RTU data sessions.

◆ *A designed-for-radio protocol optimizes the data transfer between field RTUs, including communications with a central computer system. Maximum data thruput with minimum communication channel occupancy is provided.*

Connectivity

One or two ports on the MCP-T may be used for communications with MOSCAD field RTUs via different physical media and utilizing different data speeds. Connection into Ethernet may occur via the AUI or 10-Base-T port. The MOSCAD programming ToolBox software, running in a PC computer, may also be connected to the MCP-T for over-the-air programming or diagnostics of the field RTUs.

◆ *These connectivity capabilities permit the creation of communication topographies appropriate to the needs of the system.*

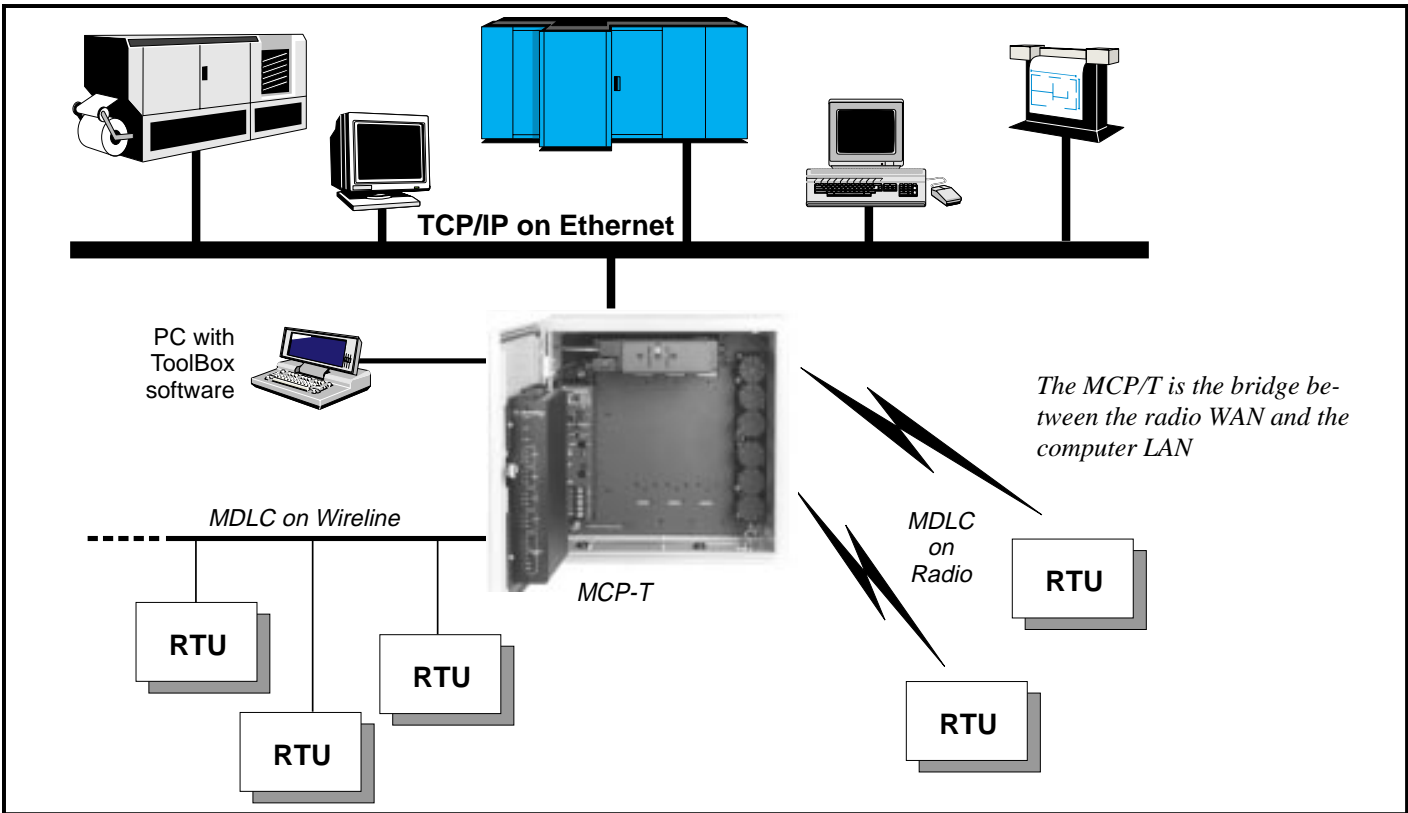
Configuration & Simulation

Each MCP-T includes Windows-based configuration software. This software eases the setting of communication parameters in the MCP-T. Sample programs are also available in C-language to assist the integrator develop the proper interface between TCP/IP and the target SCADA, dispatch, billing, and other applications.

◆ *Building the custom software interface to the TCP/IP is made quite easy via the available examples plus the development and configuration tools.*

Specifications

Order:	F43xx-family (xx denotes radio frequency and power level)	
CPU:	68360; 25 MHz clock	
Memory:	4 Mb DRAM, 1 Mb Flash	
Ports:	Port 1:	Ethernet 10-BaseT or Ethernet AUI @ 10 Mbps
	Port 2:	RS-232 Async or RS-485 @ up to 19.2 kbps
	Port 3:	RS-232 Async @ up to 19.2 kbps (up to 9.6 kbps when used with DARCOM modem)
	Port 4 (optional):	Radio Communications: FSK @ up to 2.4 kbps <i>or</i> DPSK @ 1.2 kbps
		<i>or</i> Wireline Communications: refer to separate Modem description sheet R3-11-93
		<i>or</i> RS-232: Async @ up to 19.2 kbps
Indicators:	22 LEDs: 3 per port plus 7 for Ethernet activity; Power, Reset, Fail	
Physical	Enclosure	Steel: 15 x 15 x 8.25" (38 x 38 x 21 cm); rated NEMA4
	Power Supply	Dual: 117 Vac or 230 Vac 50-60 Hz, provides power to both module and radio, charges battery; 12.6 Vdc @ 5A-h battery
Environmental:	Temperature:	0 to +60°C
	Humidity:	0 to 90% @ +50°C



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MOTOROLA

1301 E. Algonquin Road
Schaumburg, Illinois 60196
In the U.S. call: 1-800-247-2346
Outside the U.S. call: (708) 576-3107

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