CentreCOM Multiport Transceivers

- IEEE 802.3 compliant and Ethernet Version 1.0 and 2.0 compatible

- Interchangeable taps for thick (10Base-5) and thin (10Base-2)

- Switch-selectable Signal Quality Error (SQE)/Heartbeat test with LED

- Status and diagnostic LEDs

- Five-year warranty

AT-270 2-PORT TRANSCEIVER
AT-440 4-PORT TRANSCEIVER
AT-470 4-PORT TRANSCEIVER

IEEE 802.3 COMPLIANT/ETHERNET COMPATIBLE

The CentreCOM Multiport Transceivers are compact, highly reliable two-and four-port transceivers for users of Ethernet Local Area Networks (LANs.) These transceivers provide the electronic and physical interface between the Ethernet coaxial cable and the Ethernet/IEEE 802.3 station Data Terminal Equipment (DTE.)

The circuit designs of the AT-270 and AT-440 support two and four Attachment Unit Interfaces (AUIs) respectively, with a single circuit board and coaxial interface. The AT-470 transceiver incorporates the same circuit design but uses two independent boards to support four AUIs to the LAN media. These multiport transceivers offer superior quality and performance. They are easily and rapidly installed, while their compact design supports "pull-through" cable installations along narrow raceways.

The CentreCOM Multiport Transceivers use Surface Mount Technology (SMT) for reliability. Their sturdy metal construction ensures long-term, reliable operation in both commercial and industrial environments. These transceivers are compliant with the IEEE 802.3 specifications and are plug-compatible with existing Ethernet networks.

These transceivers provide a user-selectable switch permitting the network manager a choice between enabling or disabling the SQE test. This choice ensures compliance with the IEEE specifications as well as extending the transceivers' functionality for use with repeaters. The AT-470 provides two user-selectable SQE switches, one for each circuit board, so that both device types can be supported simultaneously from one transceiver.

The CentreCOM Multiport Transceivers feature six, five and twelve LED indicators, respectively. These LEDs facilitate installation and assist in fault isolation.

AT-270, 440, 470

STATUS INDICATORS

Power	Indicates power for the transceiver circuit from an attached station
Transmit	Indicates packets from the station (AUI) are being transmitted on the Ethernet coaxial cable
Receive	Indicates packets are being received from the Ethernet coaxial cable
Collision	Indicates collisions are present on the network
SQE Test	Indicates SQE/Heartbeat test function has been enabled

ELECTRICAL CHARACTERISTICS

Data Rate — 10 Mbps/CSMA/CD

Transceiver Cable Interface:
Impedance
Input — 78 W ±1%
Output — 78 W ±5W
Input/Output Voltage — 700 mV (Typical)

Coaxial Cable Interface:
Input Impedance — >100K W
Capacitance — <2 pF
Input / Output Voltage
DC Offset — -0.9 to -1.1 V
AC Offset — ±870 mV (Typical)

Transmit:	Typical	Worst
Transmit		
Rise/Fall Time	25 ns	±5 ns
Static Delay	26 ns	
Bit Loss	2 bits	
Jabber		
Control Time		29 ms
Reset Time	413 ms	
Recovery Time		1 ms
Receive / Collision:		
Static Delay		50 ns
Bit Loss	5 bits	
Collision Detection Time		900 ns
SQE Test		
Delay Time	860 ns	
Length	752 ns	

POWER CHARACTERISTICS

Isolation:
Impedance — 250K W (Minimum) at 60 Hz
Breakdown Voltage — 2000 V
Supply Voltage(Station side) — 11.4 to 15.75 V
Consumption — 500 mA (Maximum) at 12 V ±5%

PHYSICAL CHARACTERISTICS

Dimensions:
AT-270 — 16.3 cm x 6.9 cm x 3.3 cm (6.4 in x 2.7 in x 1.3 in)
AT-440/AT-470 — 16.3 cm x 6.9 cm x 5.6 cm (6.4 in x 2.7 in x 2.2 in)

Weight (less tap): 284 g (10.0 oz)

Temperature:
Operating — 0° to 50° C
Storage — -20° to 60° C

Relative Humidity: 5% to 80% noncondensing

Transceiver Cable Interface:
15 pin male subminiature D-connector with locking posts

Electrical / Mechanical Approvals:
EMI — FCC Class A
Safety — UL, CSA, TUV-GS

ORDERING INFORMATION

Part Number	Media	Network Type
AT-274/444/474	Thin Coax	10Base-2 (BNC)
AT-275/445/475		Transceiver only, no tap
AT-276/446/476	Thick Coax	10Base-5 (Stinger type)
AT-277/447/477	Thin Coax	10Base-2 (BNC-T)
AT-278/448/478	Thick Coax	10Base-5 (N series)
AT-279/449/479		Direct-connect

Part Number	Accessories
AT-04	10Base-2 BNC connector
AT-06	10Base-5 Vampire connector
AT-07	10Base-2 BNC-T connector
AT-08	10Base-5 N-Series connector
AT-09	"Direct-Connect" internal termination and cover lid
AT-060-K	Vampire repair kit
AT-1220-K	Vampire connector installation tool kit
AT-BRKT-7A	Mounting bracket with strain relief
AT-BRKT-7B	Mounting bracket without strain relief

AV Allied Telesyn

Transceivers, Repeaters & Fanouts

Single/Multi-port Transceivers & Fanouts

Allied Telesyn is the undisputed market leader world-wide for Ethernet transceivers, repeaters, and fanouts. No other vendor offers as many media options and configurations.

10Mbps Ethernet single- and multi-port transceivers

AT-200 Series   TAA

| SQE | LED | Jabber |

Physical specs: 112mm x 51mm x 31mm, 369g 4.4" x 2" x 1.2", 0.81lbs

AT-205
No Backbone Tap ⟷ AUI/M 1 Port

AT-206
Thick Coax Stinger Tap ⟷ AUI/M 1 Port

AT-208
Thick Coax N-Type Tap ⟷ AUI/M 1 Port

AT-209
BNC Vertical Tap ⟷ AUI/M 1 Port

AT-270 Series   TAA

| SQE | LED | Jabber |

Physical specs: 163mm x 69mm x 33mm, 284g 6.4" x 2.7" x 1.3", 0.62lbs

AT-275
No Backbone Tap ⟷ AUI/M 2 Ports

AT-276
Thick Coax Stinger Tap ⟷ AUI/M 2 Ports

AT-278
Thick Coax N-Type Tap ⟷ AUI/M 2 Ports

AT-440 Series   TAA

| SQE | LED | Jabber |

Physical specs: 163mm x 69mm x 56mm, 284g 6.4" x 2.7" x 2.2", 0.62lbs

AT-445
No Backbone Tap ⟷ AUI/M 4 Ports

AT-446
Thick Coax Stinger Tap ⟷ AUI/M 4 Ports

AT-448
Thick Coax N-Type Tap ⟷ AUI/M 4 Ports
• Single circuit board

AT-470 Series   TAA

| SQE | LED | Jabber |

Physical specs: 112mm x 51mm x 31mm, 369g 4.4" x 2" x 1.2", 0.81lbs

AT-475
No Backbone Tap ⟷ AUI/M 4 Ports

AT-476
Thick Coax Stinger Tap ⟷ AUI/M 4 Ports

AT-478
Thick Coax N-Type Tap ⟷ AUI/M 4 Ports
• Two circuit boards

AT-280   TAA

| LED |

AUI/F x1 Port ⟶ AUI/M x2 Ports

AT-280-05
Two-port fanout

Physical specs: 163mm x 71mm x 33mm, 284g 6.4" x 2.8" x 1.3", 0.62lbs

AT-480   TAA

| LED |

AUI/F x1 Port ⟶ AUI/M x4 Ports

AT-480-05
Four-port fanout

Physical specs: 163mm x 71mm x 33mm, 284g 6.4" x 2.8" x 2.2", 0.62lbs

AT-810SL   TAA

| SQE | LED | Cascade | Int Pwr |
| 19" Std |

AUI/F x1 Port ⟶ AUI/M x8 Ports

AT-810SL-xx
Eight-port rack-mountable fanout
xx = 15 for US power cord, 25 for no power cord

Physical specs: 432mm x 252mm x 46mm, 2.1 Kg 17" x 9.9" x 1.8", 4.6lbs