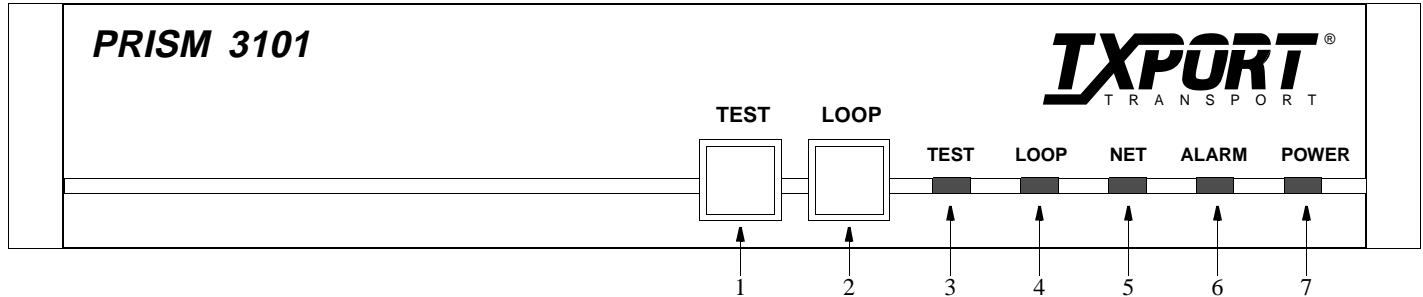


### Front Panel



### Front Panel Description

Index	Item	Function
1	TEST	When this button is pushed once, the unit transmits five seconds of inband loop code out to the network (either LLB or V.54 depending on Switch S1 -7). The indicator blinks green during transmission of the loop code. If Switch S2-8 is set to Clear Loop, the data from the DTE is passed to the network and data from the network is passed to the DTE. The TEST indicator is solid green in this mode. If Switch S2-8 is set to BERT, the test pattern last selected is transmitted toward the network. The received pattern is compared and if it is error free, the TEST indicator remains green. If pattern errors are detected, the TEST indicator turns red for a minimum of one second. If the TEST button is pushed again, the unit transmits 5 seconds of inband loop down code and returns to normal operating mode. The TEST indicator is then turned off.
2	LOOP	When this button is pressed once, the unit activates a line loopback, looping the network receive data back to the network, and looping the data from the DTE ports back to the DTE. The LOOP indicator is lit while the unit is in loop. If pushed again, the unit clears the loop and turns off the LOOP indicator.
3	TEST	This 3-color LED flashes green when the unit is transmitting loop code. It is green continuously when BERT is on with no errors or the unit is in a clear test. It is red when the BERT is on and is receiving errors.
4	LOOP	This amber LED lights continuously when the unit is in any loop condition.
5	NET	This 3-color LED is green when the unit is in frame sync. It is amber when the unit is receiving a yellow alarm from the far end. It is red when the unit is out of frame sync.
6	ALARM	This red LED lights continuously when the unit is in an active alarm condition. It flashes if the switch configuration is invalid.
7	POWER	This green LED lights continuously when power is applied to the unit.

## Specifications

### Network Interface

Line Rate: 1.544 Mb/s ( $\pm 50$  ppm)  
 Line Framing: D4 or ESF  
 Line Code: AMI or B8ZS  
 Input Signal: 0 to -27 dB ALBO  
 Connection: RJ-48C jack, 100 W ( $\pm 5\%$ )  
 Output Signal: 3.0 V ( $\pm 10\%$ ) base-peak into 100  $\Omega$  with protection  
 Line Build Out: 0, -7.5, -15, -22.5 dB attenuation  
 Transient Voltage: 1000 V protection, fused in/out  
 Jitter Control: per TR62411 and T1.403  
 Timing Source: Internal, recovered line clock, external DTE  
 Ones Density: B8ZS, Nx56 bit stuffing, alternate fill; TR62411

### Equipment Interface

DTE Ports: 3101 single and 3102 dual port  
 Compatibility: EIA 530 (RS-422), female DB-25  
 CCITT V.35, female 34-pin

Data Rate: Synchronous, Nx56 kb/s or Nx64 kb/s (where N = 1 to 24); independent selection each port  
 Clocking: Internal, External, Oversample  
 Data Invert: Independent selection each port

### Management Interfaces

**Supervisory Port**  
 Connection: 8-pin modular (RS-232)  
 Data Rates: 1.2, 2.4, 9.6, and 19.2 kbps

**SLIP Port**  
 Connection: 8-pin modular (RS-232)  
 Data Rates: 1.2, 2.4, 9.6, and 19.2 kbps

**SNMP/Telnet Ethernet (option)**  
 Connection: 8-pin modular (RJ-45)  
 Network Protocol: TCP/IP based networks  
 Data Rate: 10 Mbps  
 Compatibility: 10BASE-T

**SNMP/Telnet Token Ring**  
 Connection: 8-pin modular (RJ-45)  
 Network Protocol: TCP/IP based networks  
 Data Rate: 4 or 16 Mbps  
 Compatibility: Type 3 Unshielded Twisted Pair

### Diagnostics

Performance: Monitoring per TR54016, T1.403  
 Network Loops: Line or payload loopback  
 Fractional Loop: Responds to inband V.54 loop  
 DTE Port Loops: Bidirectional loop to DTE or Net  
 BERT: Multiple test patterns toward network or DTE ports

### Alarms

Activation: Programmable thresholds  
 Reporting: Front panel LEDs, call out on alarm (COA), SNMP TRAPS

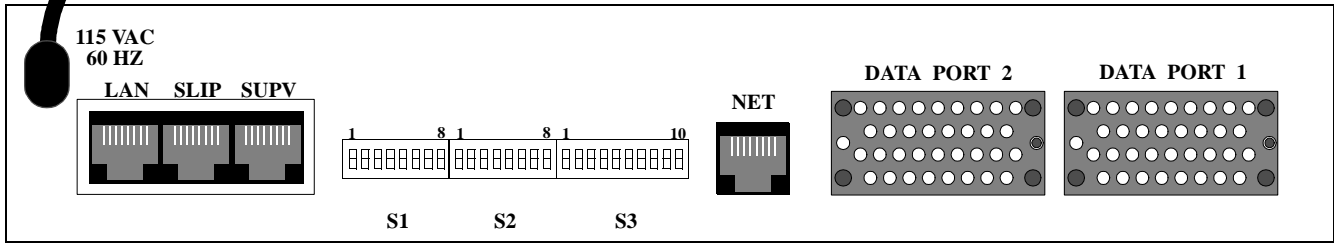
### Power

110 VAC: 0.2 A, 24 W max, 82 BTU max

### Mechanical

Mounting: Desktop or horizontal rack  
 Dimensions: 12" (30.48 cm) wide, 1.75" (53.34 cm) high, 9" (22.86 cm) deep  
 Weight: 8 pounds (1.814 kg)

## Rear Panel (dual port 3112 model shown)



### Switch S1

**S1-1:** Determines the power up mode.

Dn: Switches Up: RAM

S1-2	S1-3	SUPV Port Rate
Up	Up	1.2 kbps
Dn	Up	2.4 kbps
Dn	Dn	9.6 kbps
Up	Dn	<u>19.2 kbps</u>
S1-4	S1-5	SLIP Port Rate
Up	Up	1.2 kbps
Dn	Up	2.4 kbps
Dn	Dn	9.6 kbps
Up	Dn	<u>19.2 kbps</u>

**S1-6:** Sets the channel assignment mode.

Dn: Contiguous Up: Alternate

**S1-7:** Sets the Port 1 rate multiplier.

Dn: N x 64 k Up: N x 56 k

**S1-8:** Sets the Port 2 rate multiplier.

Dn: N x 64 k Up: N x 56 k

### Switch S2

**S2-1:** Set the network line framing.

Dn - ESF Up - D4

**S2-2:** Sets the network line coding.

Dn - B8ZS Up - AMI

S2-3	S2-4	Network LBO
Dn	Dn	<u>0 dB</u>
Up	Dn	-7.5 dB
Dn	Up	-15.0 dB
Up	Up	-22.5 dB
S2-5	S2-6	Timing Source
Dn	Dn	<u>Network</u>
Up	Dn	Internal
Dn	Up	Port 1 EXC
Up	Up	T1-DTE

**S2-7:** Test button loop code.

Dn: LLB code Up: V.54 code

**S2-8:** Test button operational mode.

Dn: BERT Up: Clear loop

### Switch S3

# of DSOs	S1-7 up	S1-7 dn	S3-1	S3-2	S3-3	S3-4	S3-5
	S1-8 up	S1-8 dn	S3-6	S3-7	S3-8	S3-9	S3-10
Disable	Disable		Dn	Dn	Dn	Dn	Dn
1	56 kb/s	64 kb/s	Up	Dn	Dn	Dn	Dn
2	112	128	Dn	Up	Dn	Dn	Dn
3	168	192	Up	Up	Dn	Dn	Dn
4	224	256	Dn	Dn	Up	Dn	Dn
5	280	320	Up	Dn	Up	Dn	Dn
6	336	384	Dn	Up	Up	Dn	Dn
7	392	448	Up	Up	Up	Dn	Dn
8	448	512	Dn	Dn	Dn	Up	Dn
9	504	576	Up	Dn	Dn	Up	Dn
10	560	640	Dn	Up	Dn	Up	Dn
11	616	704	Up	Up	Dn	Up	Dn
12	672	768	Dn	Dn	Up	Up	Dn
13	728	832	Up	Dn	Up	Up	Dn
14	784	896	Dn	Up	Up	Up	Dn
15	840	960	Up	Up	Up	Up	Dn
16	896	1024	Dn	Dn	Dn	Dn	Up
17	952	1088	Up	Dn	Dn	Dn	Up
18	1008	1152	Dn	Up	Dn	Dn	Up
19	1064	1216	Up	Up	Dn	Dn	Up
20	1120	1280	Dn	Dn	Up	Dn	Up
21	1176	1344	Up	Dn	Up	Dn	Up
22	1232	1408	Dn	Up	Up	Dn	Up
23	1288	1472	Up	Up	Up	Dn	Up
24	1344	1536	Dn	Dn	Dn	Up	Up

Factory defaults for all switch settings are shown underlined.

Any DSO not allocated to a data port is automatically routed to the T1 DTE port.

### Rear Panel Pinouts

Pin	LAN Ethernet	LAN Token Ring	SUPV/SLIP Terminal	SUPV/SLIP Modem	Network
1	Data Out		DCD Out	DTR Out	Data In
2	Data Out		CTS Out	RTS Out	Data In
3	Data In	Data Out	Frame Gnd	Frame Gnd	
4		Data In	Data Out	Data Out	Data Out
5		Data In	Data In	Data In	Data Out
6	Data In	Data Out	Signal Gnd	Signal Gnd	
7			RTS In	CTS In	Chassis Gnd
8			DTR In	DCD In	Chassis Gnd

### Data Port Pinouts

Common Name	DB25 25-pin	V.35 34-pin
Frame Ground	1	A
Signal Ground	7	B
Transmit Data	2, 14	P, S
Receive Data	3, 16	R, T
Request to Send	4, 19	C
Clear to Send	5, 13	D
Data Set Ready	6, 22	E
Data Term Ready	20, 23	H
Data Carrier Detect	8, 10	F
Transmit Clock	15, 12	Y, AA
Receive Clock	17, 9	V, X
Terminal Timing	24, 11	U, W



TxPORT

127 Jetplex Circle  
Madison, Alabama 35758

#### Customer Service

888-4TxPORT, ext. 227

800-926-0085, ext. 227

#### Technical Support

(8 a.m. to 5 p.m. Central Time)

888-4TxPORT

800-285-2755

205-772-3770

support@txport.com

(after hours emergencies)

800-285-2755

---

# Addendum

**Document:** PRISM 3101/3102 Reference Manual & Configuration Guide

**Date:** June 12, 1998

The power ratings, as listed on page 1-2 of the manual and in the Specifications section of the configuration guide, have been revised as follows.

**Power AC:** 115 VAC, 160 mA, 15 W maximum, 51 BTU maximum