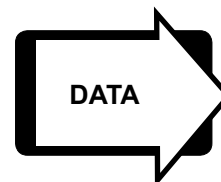**MERIDIAN** TECHNOLOGIES

Programmable Delay Line

DATA →

FEATURES:

- 1024 Step Delay Line

- RS-232, RS-422, TTL Input / Output

- Programmable Delay Range 0.004ms - 131ms

- 256-Bit Shift Register

- All Silicon, Low Power CMOS Technology

- Low Ground Bounce Noise

- High Leading and Trailing Edge Accuracy

- Surface Mount Technology (SMT) for High Reliability and Repeatability

- *SpectraSmart*™ Network Management Compatible

- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters

- Hot Swappable Cards

- DB-9 Connector for Data (standard) BNC, Screw Terminals, RJ-45, DB-25, DB-15HD Connector (optional)

DESCRIPTION:

The SX-1DX module is a Programmable Delay Line and part of DigiSlim™ product family, which incorporates an all-digital encoding technology.
This system have following features:

- Single Delay Line with User Selectable 1024 steps
- Maximum delay can be selected by DIP Switch in the range 0.008ms - 8.2ms.

The SX-1DX is also compatible with Meridian's *SpectraSmart* Network management and diagnostic PC based system. See the *SpectraSmart* brochure for additional details.

CONFIGURATIONS:

The SX-1DX product is available as rack mount cards that can be installed in either Meridian's desk chassis or in 19" racking frames. Shelf/surface mount modules are also available. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These systems can be made a standalone system by   using the SR-500/S, SR-1000/s, 1 or 2 slot desk / wall mount chassis (87 VAC- 264VAC)

MARKETS:

√   Military Applications
√   Security and Surveillance
√   Intelligent Transportation System (ITS)
√   Access Control Systems

SPECIFICATIONS:

Delay Specifications

Total Delay*	8.2 ms
Taps	1024
Tap-Tap Delay	0.008 ms
Delay Adjustment Range	0.008 - 8.2 ms
Max Input Frequency	3.1 KHz
Min Input Pulse Width	0.16 ms
Pulse Width Distortions	10% max
Delay Tolerance	1% max

Interface

Electrical Input / Output	RS-422
	RS-232
	TTL

Connectors

Data	DB-9 (default)
	Optional:
	BNC, Screw Terminals, RJ-45,
	DB-25, DB-15HD
Power (module)	See SR-500 Brochure for details

Indicators (LEDs)

1 - Green	Power On
1 - Green	Data Input
1 - Green	Data Output

Power

Card	1 W

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") W
	20mm (0.80") W
Weight (Card)	450 gms (16 Oz)
No. of Slots	1
Module	See SR-500 Brochure

Enviromental

Operating Temperature	-34°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>170,000 hours @ Ground Fix
	35°C per MIL217F

Part Numbers:

SX — 1D X — ☐

RS-232 - **D**
RS-422 - **F**
TTL - **L**

Leave Blank for default (DB-9 Connector)
B - *BNC Connector*
J - *RJ-45 Connector*
L - *DB-15 HD Connector*
M - *DB-25 Connector*
S - *Screw Terminals Connector*
C - *Conformal Coating*
D - *SpectraSmart ™ DIAGNOSTIC*

DATA SOURSE → SOURSE SIGNAL → [SX-1DX] → DELAYED SIGNAL → DATA RECEIVER

SX-1DX