

MILITARY & DEFENSE

NTDS Serial Isolation Tap Box



RELIABLY TAP AND EXTEND NTDS COMMUNICATIONS

The IXI Technology NTDS Tap Boxes are the solution for reliably tapping all NTDS Serial and Parallel Types. It connects easily to existing cables froming a tee connection that can be used for data monitoring and acquisition over long distances

Interfaces

Signal integrity is assured when using all types, Serial and Parallel configurations. Isolated variants can be powered up or down with no impact to active NTDS communications. Cable shielding through the tap is unbroken and is completely isolated from chassis ground. Isolation of the tapped signals from the tee connection is achieved by transformer-coupling them to the input stage of separate tee circuits. The tee circuits produce regenerated NTDS signals that allow the remote monitor to be located at distances up to the maximum cable length specified in MIL-STD-1397C for NTDS. The Tap's negligible load factor allows multiple taps to be placed on the same cable with no signal degradation. It's also possible to tap the tee output to another tap, cascading taps as many times as needed to distribute the signal to multiple destinations. Acces the NTDS data you need without interference to your system with IXI Tap Box.

Repeater

The NTDS Repeater variant operates a parallel NTDS channel beyond the maximum length specified in MIL-STD-1397C. It installs inline on an active channel, providing the signal conditioning and amplification needed to receive and automatically re-transmit NTDS signals up to 250 feet. Repeater operation is performed at the electrical layer so it does not require programming or any knowledge of the interface protocol. The repeater is switch selectable for NTDS all types can be configured with a choice of commonly used NTDS military connectors.

Universal Breakout

The IXI Universal NTDS Breakout Box is the effortless way to make connections to parallel NTDS interfaces. It's equipped with the most common military NTDS connectors as well as header connections for IXI NTDS products and commercially available logic analyzers. Military connectors on the unit are keyed to accept one

NTDS parallel input/output cable pair. Each cable has a separate 32-bit paths through the box. NTDS signals entering the box from any connector set are available at all other connector set and to a breakout point for tapping the signals. It can be used in a powered or unpowered state. When powered, it provides the NTDS signals as differential outputs on the logical analyzer headers. The headers provide a convenient way to connect the following analyzers directly to the tap box without the need for multiple pods and probes:

- IXI NTDS I/O Analyzer (NIA-II™)
- NCI GoLogic™ Logic Analyzer
- HP/Agilent Logic Analyzer models (most models) 1650, 1660, 1670, 1680 and 1690 or equivalent
- Tektronix TLA 7xx models or equivalent with (P6417/6418) probes

The unit can be used for these additional applications:

- Use it as a universal end-around adapter for cable testing. When connected at the distant end of a cable set with the input output, cables can be checked by simply performing end-around tests
- Use it to temporarily adapt IXI VME and PCI NTDS boards to military connectors for system development. Use it to transition between different military connector types

It's the best way to make complicated NTDS connections simple. Save time and trouble with IXI's Parallel NTDS Universal Breakout Box.

Other Connectors

- 80 pin connectors for interface to IXI PCI Parallel NTDS boards
- 34 and 50 pin connectors interface to IXI VME Parallel NTDS boards

Analyzer Interfaces

- IXI NIA-II™ DB50/37
- NCI GoLogic or equivalent 60 pin headers
- HP/Agilent 1650, 1660, 1670, 1680 and 1690 or equivalent
- Tektronix TLA 704 or equivalent (optional)



Serial NTDS Isolation Tap Box



Parallel NTDS Isolation Tap Box



Universal NTDS Parallel Breakout Box

	Parallel	Serial	
Temperature (Operating)	0 to +55°C	0 to +50°C	
Humidity	5% - 90% (non-condensing)	5% - 90% (non-condensing)	
Input Impedance	MIL-STD-1397C	>2K Ohms to Source or Sink	
Input Resistance	>50K Ohms		
Output Impedance		NTDS Type "E" 50 Ohms NTDS Type "D" 70 Ohms	
NTDS Connectors	M81511/01EF01P1 AND P2 M28840/12AG1P1 AND P2 D38999/20WG35PN AND PA	NTDS Type "E"	(4) Source/Sink Input, Trompeter BJ80 (tri-axial)
			(2) Output Interface, Trompeter BJ770 (tri-axial)
		NTDS Type "D"	(4) Source/Sink Input, Trompeter BNC (co-axial)
			(2) Output Interface, Trompeter BNC (co-axial)
Output Interface	DB-50P (control signals and lower 16 bits of data and returns) DB-37P (upper 16 bits of data and returns)		
Controls	Manual switch for selection of Parallel NTDS Type: A, B, C or H	AC Power Switch	
Indicators	Red LED Indicators for NTDS control signals- Input Channel: EIE, EIR, IDA and IDR Output Channel: EFA,EFR,ODA and ODR	Output (A/B) LED activity indicators (green) AC applied power LED indicators (green)	
Power Requirements	90-240VAC (1A, MAX);	90-240VAC (1A, MAX); Power Cable: IEC Publication 320	
Weight	12 lbs.	10 lbs.	
Dimensions	4.8"H x 12"W x 9"D	4.7"H x 7.9W x 7.9"D	
Model Numbers	AN-BT511-00 Isolated Passive Tap, NTDS Type A/B/C/H, M81511, 85 pin AN-BT840-00 Isolated Passive Tap, NTDS Type A/B/C/H, M28840, 92 pin Isolated Passive Tap, NTDS, Type A/B/C/H, M38999, 79 pin	AN-ST012-00 Isolated Passive Tap, NTDS Type E, Triaxial Connectors AN-ST013-00 Isolated Passive Tap, NTDS Type D, Coaxial Connectors	

	Repeater	Universal Breakout
Temperature (Operating)	0 to +55°C	0 to +55°C
Humidity	5% - 90% (non-condensing)	5% - 90% (non-condensing)
Input Impedance	MIL-STD-1397C	>2K Ohms to Source or Sink
Propagation Delay	~200 Nano-seconds	
NTDS Connectors	M81511/01EF01P1 AND P2 M28840/12AG1P1 AND P2 D38999/20WG35PN AND PA	M81511 M28840 D38999
Controls	Manual switch for selection of Parallel NTDS Type: A, B, C or H	AC Power Switch
Indicators	Red LED Indicators for NTDS control signals- Input Channel: EIE, EIR, IDA and IDR Output Channel: EFA,EFR,ODA and ODR	
Power Requirements	120VAC (2A, MAX);	
Weight	12 lbs.	25 lbs.
Dimensions	4.8"H x 12"W x 9"D	
Model Numbers	AN-RE511-00 Repeater, NTDS Type A/B/C/H, M81511, 85 pin AN-RE840-00 Repeater, NTDS Type A/B/C/H, M28840, 92 pin AN-RE999-00 Repeater, NTDS Type A/B/C/H, D38999, 79 pin	AN-PT000-00 Universal Breakout Box, NTDS, Type A/B/C/H, M81511, M28840, D38999 connectors AN-PT000-03 Universal Breakout Box, NTDS, Type A/B/C/H, M81511, M28840, D38999 connectors, with Tektronix analyzer interface