



# UPIU

Integrate militarized and COTS printers with NTDS and Ethernet-based systems



The IXI Technology Universal Printer Interface Unit™ (UPIU) acts as a universal front end interface between systems and printers. It replaces the militarized PT-540 and PT-548 printer with any commercial off-the-shelf (COTS) printer. The UPIU connects to the existing power and NTDS interface cables of the PT-540 and 10-BASE2 interface of the PT-548, emulating its interface protocol for transparent operation with the host computer. It also supports additional Ethernet based printing protocols. The UPIU simplifies printing hard copies through an external printer connected via USB or Ethernet.

## APPLICATIONS:

- » **Defense Systems:** Facilitates secure and reliable document printing for naval and defense operations requiring robust and compatible printer interfaces.
- » **Legacy System Upgrades:** Modernizes NTDS systems by interfacing with contemporary commercial printers while ensuring operational continuity.
- » **Mixed Network Printing:** Bridges NTDS and Ethernet networks for seamless operation in hybrid environments.
- » **Technical Operations and Maintenance:** Provides on-site printing of technical manuals, diagnostics, and logs in rugged environments.
- » **Emergency and Field Applications:** Enables portable printing for field or emergency scenarios demanding ruggedness and reliability.
- » **Enterprise IT Environments:** Connects enterprise systems to enable secure printing across NTDS or Ethernet interfaces for industrial setups.

## BENEFITS:

- » **Extends System Longevity:** Integrates modern printers to extend the lifespan of defense and industrial systems.
- » **Reduces Operational Cost:** Eliminates proprietary printing solutions, reducing procurement and operational expenses.
- » **Simplifies Transition:** Facilitates without disrupting existing operations or requiring extensive retraining.
- » **Enhances Document Security:** Ensures secure workflows for printing sensitive documentation.
- » **Adapts Easily:** Supports a wide range of COTS printers, allowing flexibility in choosing and replacing printing devices.
- » **Ensures Global Usability:** Operates reliably in varied environments, suitable for international deployments.
- » **Optimizes Maintenance:** Minimizes disruptions with robust hardware designed to withstand challenging conditions.
- » **Improves Efficiency:** Streamlines document production, saving time and resources in critical environments.
- » **Enables Proactive Monitoring:** Supports remote monitoring to identify and address potential issues, minimizing downtime.

## FEATURES

- » Meets U.S. Navy environmental qualification standards for shock, vibration, temperature, humidity, EMI, airborne noise, altitude, and drip conditions, ensuring rugged shipboard performance.
- » Supports the Aegis Operational Readiness Test System (ORTS), featuring integration with the ORTS UYK-44 computer via the MIL-STD-1397C NTDS parallel interface.
- » Installs easily with plug-compatible input power and data connectors, requiring no new cabling.
- » Supplies printer power from the UPIU to minimize shipboard power impact when changing printers.
- » Includes self-test and maintenance features, such as front panel buttons for self-test and form feed, and indicator lights for status and error monitoring.
- » Features a fan-less design to minimize maintenance.
- » Provides multiple ports, including NTDS, display, USB, and Ethernet, all housed in a durable enclosure.
- » Supports SNMP remote monitoring for enhanced remote management.
- » Optional rugged printer mount available for added flexibility.

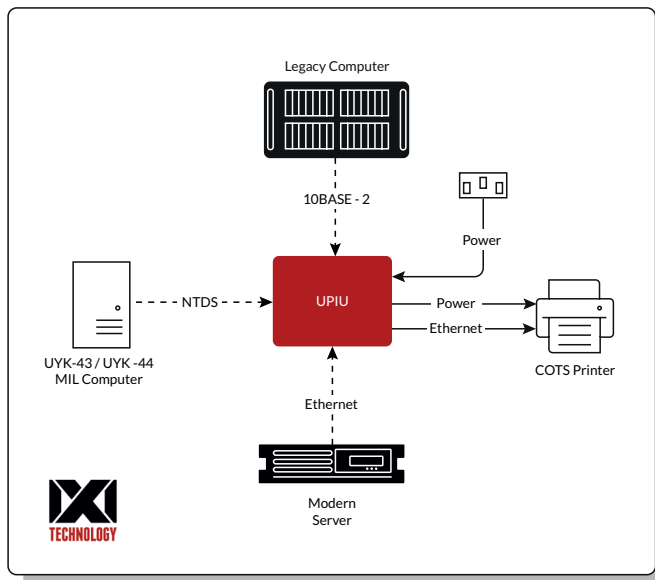
Please contact [sales@ixitech.com](mailto:sales@ixitech.com) or [info@ixitech.com](mailto:info@ixitech.com) for more details.

## TECHNICAL SPECIFICATIONS

|               |  |
|---------------|--|
| Input power   | 115 VAC, 60 Hz, Single Phase, with connector MS3472L12-3P              |
| Printer power | 115 VAC, 60 Hz, Single Phase, with connector MS3452L14S-7P             |
| Line current  | 1.1 A typical  |
| Dimensions    | 12.0" W x 14.0" D x 4.4" H   |
| Weight        | 12.2 lbs.  |
| Ethernet      | Two 10/100/1000 BaseT, RJFTV21N (RJ-45) connector, one 10BASE2 coaxial |
| USB           | Three USB ports  |
| Display       | One VGA, one HDMI  |
| NTDS          | One NTDS type B interface MS3124E22-55SY/MS3124E22-55S compatible      |

## UPIU ENVIRONMENTAL SPECIFICATIONS

|                |   |
|----------------|---|
| Temperature    | MIL-STD-810H<br>Method 501.7 & 502.7 Procedure II<br>Operating: 0 to +50 C<br>Method 501.7 & 502.7 Procedure I<br>Non-operating: -25 to +65 C |
| Shock          | MIL-S-901D, Grade B, Class I, Type A, Lightweight   |
| Vibration      | MIL-STD-167-1A Type I 4-25 Hz   |
| Humidity       | MIL-STD-810H, Method 507.6<br>Procedure I, B1<br>95% (non-condensing), 25 to 40 C   |
| EMI            | MIL-STD-461G<br>RE101, RE102  |
| Drip           | MIL-STD-810H Method 506.6 Procedure III, 15°  |
| Airborne Noise | MIL-STD-1474E, Appendix E, Equipment Grade A-12   |
| Altitude       | MIL-STD-810H, Method 500.6<br>Procedure I, 15000 ft.  |
| Power          | MIL-STD-1399 Section 300B<br>Type I Single Phase Power, Paragraphs 5.2.4, 5.3.1, 5.3.2  |



## MODELS

UPIU-00001-01, Universal Printer Interface Unit

### LEGEND

-----> Optional

\*For UPIU mounting assembly options, please contact [sales@ixitech.com](mailto:sales@ixitech.com)