Bench Test Equipment for LRU & LLRU Equipment

The BTE consists of an Industrial Rack contents all the hardware and mechanical components needs for testing the MIOS Elettronica devices and used by technicians to perform rapid Go/No-Go testing and troubleshooting of Line Replacement Unit (LRU) and Lowest Level Replaceable Unit (LLRU).

BTE Software, developed on National Instrument environments TestStand and LabVIEW, consists of test sequences and modules managed to verify proper operation of the UUT, capture intermittent failures, identify faults, compile Test Report and saving Data into the Database.

To check the proper functionality of the BTE, a Self-Test feature is provided too.

The BTE includes the following Hardware components:

- Industrial PC (Windows based)
- UPS, Laser Printer, QRcode Reader,
 Keyboard with Touchpad and an 19-inch LCD monitor
- Netgear Switch 10/100 Mbps

Signal Conditioning Drawer and Matrix Relay composed by:

- N° 11 32Ch 2A Relay Boards
- N° 1 8Ch 16A Relay Board
- N° 1 Frequency & PWM Signal Conditioning Board
- N° 1 Switching Communication Bus Relay Board
- N° 2 Loads Board



MAIN STANDARDS COMPLIANCE

CE - IEC 61375 - UIC 556

ENVIRONMENTAL

- External Power supply: 110 Vac 240 Vac @50-60 Hz up to 5A.
- Power consumption: 300W (110 Vac @ 60Hz) typical, depending by
- Operating temperature: 50-86 °F (10-30 °C)
- Storage temperature: 50-104° F (10-40 °C)
- Humidity: 5-90% not condensing
- Dust: office environment, pollution degree 2 according to IEC Standard

SYSTEM FEATURES

- Industrial PC Windows 64-bit OS, Intel Core processor @2.4GHz, 4GB RAM and 500GB HDD
- National Instruments PXI with DAQ, DMM and Digital I/O Boards
- APC Smart UPS
- TDK Lambda Programmable Power Supplies
- MIOS TCN Gateways, IEC 61375 compliant and UIC 556 certified

STANDARD CONNECTIVITY

- External connectivity:
 - N° 1 Ethernet 10/100 Mbps
 - N° 2 frontal USB 2.0
 - N° 1 DVD/CD R-W drive
- UUT connectivity:
 - N° 2 Ethernet 10/100 Mbps with M12 connector
 - N° 1 MVB bus
 - N° 1 WTB bus
 - N° 10 I/O DIN-41612 connectors for each LRU configuration

