TEST SYSTEMS

EXPERTS IN FACTORY AUTOMATION
IPTE’s universal measuring system is a modular test system using a variety of user oriented equipment. Different platforms can be chosen or combined to build up custom test systems that meet your needs and expectations. The programming can be done using classical test software and sequencers (ATEasy, LabView, LabWindows/CVI, TestExpress, TestStand) or IPTE FrameWorX+.

The following functions can be used:

- Digital multimeter
- Source meter
- Programmable power supply
- Switch matrices
- Switch multiplexers
- Multi I/O devices
- RF power meter
- Audio analyzer
- FM radio transmitter
- Led color and illuminance controller
- Motor control unit
- RF switching
- CAN, LIN controller

The measuring system can be easily adapted to the respective application.
Boxed

- Industrial technology
- Standard market interface (Ethernet)
- Small and modular form factor
- Interactive debugging facilities
- Reduced integration cost
- Open platform for personalization

PCB

- Easy combining with other equipment
- Remote/distributed functionalities
- Possibility to integrate in test fixtures
- Stand-alone operation possible
- Less maintenance effort
- Shorter wire lengths

FrameWorX+

The FrameWorX+ software allows you to generate test programs within shortest possible time.

- Operating system: Windows XP
- Test sequencer environment available with full flexibilitiy regarding access to system and measurement hardware
- Integrated debugger
- Integrated editors for all needed processing steps
- Automatic or manual control of test sequences
- Monitor for sequence in operation
- Report generation in XML-format
- Choice of language for operator interaction
- Full debug functionality
## Specification

### Programmable Power Supply
- **ILAN-PSP-01**
  - **Uout**: 1 - 15 V (10 mV resolution)
  - **Isource**: max 3 A; **Isink**: max 1 A
  - **Umeasure**: 0 - 15 V (1 mV resolution)
  - **Imeasure**: 10 µA - 10 mA (1 µA resolution)
  - General purpose digital I/O

- **ILAN-PSP-02**
  - **Uout**: 3 - 36 V (25 mV resolution)
  - **Isource**: max 3 A
  - **Umeasure**: 0 - 36 V (10 mV resolution)
  - **Imeasure**: 10 mA - 3 A (3 mA resolution)
  - General purpose digital I/O

### Digital Multi Meter
- **ILAN-DMM-01**
  - DC Voltage: 0 - 16 V, 0.5% acc (1 mV res)
  - DC Current: 0 - 2 A, 0.5% acc (multirange 1mA-2A)
  - True RMS, P-P, Mean
  - Sampling rate: up to 250 kS/s
  - General purpose digital I/O

- **ILAN-DMM-02**
  - AC/DC Voltage: 0 - 400 V, multirange 12 bit
  - AC/DC Current: 0 - 10 A, multirange 12 bit
  - True RMS, P-P, Mean
  - Sampling rate: up to 250 kS/s
  - General purpose digital I/O

### RF Power Meter
- **ILAN-RFP-01**
  - Basic field strength meter
  - Frequency range 76 MHz - 2,5 GHz
  - Measurement -60dBm - 0 dBm (Accuracy +/- 1 dB)
  - SWR max. 1.5
  - Impedance 50 ohm
  - General purpose digital I/O

### Audio Analyzer
- **ILAN-AUD-01**
  - 6 diff. channels input, multi tone analysis
  - Audio generation: 20 Hz - 20 kHz, 1 mV - 2 V
  - Amplitude measurement : 1 mV - 2 V
  - THD and noise measurement : 0.01% - 20%

### Multi IO
- **ILAN-MIO-01**
  - Digital 24 bit I/O
  - Analog Input 16 channels, levels up to 48 V
  - Logic levels 3.3 V - 5 V - 24 VDC
  - I²C, CAN, I²S, UART, SPI
  - PWM static / dynamic
  - Analog out, 2 channels

### Switch Matrix/Mux/Relay
- **ILAN-SWU-01**
  - 4 x 24, 2 x 48, 1 x 96
  - Isolated
  - 0 - 100 V, 1 A
  - Matrix / MUX configuration
  - Single pole

- **ILAN-SWU-02**
  - 32 relay
  - Isolated
  - 0 - 250 V, 2 A
  - Relay configuration
  - SPDT

### CAN Controller
- **ILAN-CAN-01**
  - Port CAN transceivers
  - High / low speed
  - Digital voltage levels 3.3 to 5 VDC

### FM Radio
- **ILAN-FMR-01**
  - 76 MHz - 108 MHz, 100 kHz steps
  - Output level 0 to 120 dBµV, 50 ohm
  - Internal audio generator (100 Hz - 10 kHz)
  - External Audio input 0 V - 1 V
  - FM modulation 0 - 75 kHz mono/stereo
  - General purpose digital I/O

### Information on variants and options on request