

The Yelo Pixi general purpose tester is a PXI based functional test system with in-circuit and continuity capability. Built into a free standing 19" rack is a PXI chassis, mass interconnect fixture interface, PC, flat screen and space for additional user selectable instrumentation.

#### Hardware features:

The system is housed in a 37U 19" rack with a fixture interface mounted at desk height complete with shelf for supporting the fixture

Rack mount PC with MXI interface.

LCD & keyboard mounted on side arm for operator ergonomics.

Mains distribution unit (MDU) and emergency stop button provide in built safety features.

The system uses a PXI chassis and a number of high density matrix cards combined with an LCR card to create an analogue in-circuit capability. A guarding card is also fitted to provide guard capability.

Functional test uses PXI instruments and multiplexes these through the relay matrix used for the in-circuit capability.

Power supplies are rack mounted and hard wired to their own connector on the fixture interface.

9U of uncommitted space for user selected instruments.



#### Fixture interface features:

The fixture interface is designed for reliability and ease of maintenance. There are 15 connector positions each 20mm x 100mm in size. Each position can be fitted with a range of connectors to suit the type of signals that will be used, the standard connector is a 96 way DIN 41216 style but the range includes high density 192 pin connectors, 40 Amp power connectors and high frequency coaxial connectors. Each of the connector blocks is wired to a card in the PXI chassis.

When a fixture or adaptor is attached to the interface it aligns accurately using dowels and then using a clamping mechanism is secured in place. There is vacuum and pneumatic control built in to the interface to facilitate the use of either type of fixture.

## Software features:

The Yelo Test Executive software provides a standard user interface and test sequencer and includes a wide range of reporting options. The high level functional test program imports user parameters to allow tests to be developed without the need to write any software code. Also included are standard continuity and in-circuit test programs which are able to read in net lists and component lists from file and test directly against these.

The standard test functions or VI's that automatically resolve the switching routes from the instruments to specific pins on the fixture interface. These VI's will allow the user to specify pin numbers on the fixture as part of a DMM or other instrument measurement call. This includes VI's to provide continuity and in-circuit measurements.

## Specification:

37U high 19" rack on heavy duty castors

(option for 27U high rack)

Mains Distribution Unit (MDU) 4U with EPO

Industrial rack mount PC - 4U

17" LCD display

18 slot PXI chassis NI PXI-1045

NI PXI-4070, 6½ digit DMM

PXI 6602 Timer counter

PXI 5402 Function generator

NI PXI-2532 128x4 matrix card (reed relay)

NI PXI-2503 24 chan mux

NI PXI-4110, triple PSU

NI PXI-6509, 96 way DIO

15 slot Fixture interface

Test executive (YTE)

## Benefits:

Uses off the shelf instruments – easy to calibrate or repair.

Fixture interface is built in, no need to source or design.

Standard fixture interface allows different fixtures and applications to run on the same system.

Pre-wired and configured – no need to waste resource putting individual instruments or components together.

Test executive included – no need to develop a custom GUI or reporting features.

Standard test programs included – for generic type tests no need to develop test software, simply fill in parameter lists.

In-circuit and continuity tests included – combinational testing made easy by using the same switch matrix for both ICT and functional tests.

Integrated package – hardware, software and fixture interface all combined into a single system. All the benefits of a product but using standard measurement cards.