

The Latest Technology  
in  
Flying Probe Test

# condor

## ATN500

- **Accurate** - Pinpoint precision - Repeatable results
- **Quick** - Fast program development - Increased test speed - 30% faster
- **Easy** - Scalable - ICT/FCT and integrated Boundary Scan
- **Economical** - New pricing makes Condor even more attractive



In-Line

FrontLoader

digitaltest



## Mechanical

Dimensions (height x width x depth) Standard 165 x 150 x 120 cm (65 x 59 x 47") with Traffic Control Unit add 30cm (12") in height  
 Weight Standard 1800kg (3,968lb)  
 Max. no. of movements 40 per second

### Probes

Number of test heads 4 on linear motors  
 Maximum number of fixed pins 1016  
 Slope of all test probes 0 and 8 degrees

### Positioning Accuracy X-Y

Minimum distance between two pins 100µm (4mil)  
 Resolution 0,625µm (0,0246mil)  
 Repetitive accuracy 25µm (1mil)  
 Minimum pad size 100µm (4mil)

### Positioning Accuracy Z

Resolution 4µm (0.157mil)  
 Default nail pressure 0,8N  
 Softlanding option for minimum impact on pads

### Board Transport

Conveyor with automatic adjustable board width

### Board Specifications

Height of components on top side max. 50mm (1.97")  
 Height of components on bottom side max. 115mm (4.53")  
 Board size (Standard) max. 500 x 400 mm (19.69 x 15.75")  
 Maximum board thickness 4mm (157mil)  
 Edge clearance 3mm (118mil)

### Operating Environment

Temperature 20-30 °C/59-95 F  
 Maximum humidity 80% not condensed

## Hardware

**Controller** Industrial PC (Pentium)

### Analog Matrix

Up to 1016 channels  
 - Array for each 128 pins  
 - Pins can be connected to one of 6 bus lines

### Signal Switching Unit (SSU)

Up to 504 channels

- Array for each 64 pins

### Hybrid Driver/Sensor module

- Inputs/Outputs ±10V programmable  
 Max. Voltage ±500mA backdriving or ±50mA in static operation

- Pin RAM (enables dynamic high speed bursts)

- One logic family per pin

### Programmable Power Supply

- One power supply channel with floating output
- Output voltage and current limit is programmable
- Short circuit monitoring via hardware and software
- Output via software disconnecting/connecting
- Separate force and sense lines
- Thermal shutdown
- Programmable power supplies (UPS) 9V/10A, 24V/5A, 45V/3.5A

## Functional Test Modules

### MPF (Memory Programming & Flash)

- Flash on board programming
- Memory test (RAM/ROM/µController)
- Parallel and serial test protocols

### MTC (ModPack - Timer Counter)

- Measurement of Frequencies, Periods, Pulse Width, Rise & Falling Time as well as events for each circuit
- 4 circuits per module on 8:1 Multiplexer = 32 inputs
- Up to 100MHz

### MSM (ModPack - Source and Measurement)

- Measurement and stimulus of voltage and current (AC & DC)
- Signal connectable to internal bus
- Accurate source of voltage and current

### MRM (ModPack - Relay Module)

- All-purpose for switching of different signals
- Connection between test item and other hardware

### MOC (ModPack - Open Collector)

- Switching of high current relays
- All-purpose for switching of different signals

### ICT Analog

Guard Ratio 1:1000  
 Voltage Source (AC/DC) 0-100V  
 Frequency DC up to 100kHz  
 Voltage measurement (AC/DC) up to 100V

- 4 Quadrature measurement
- Diodes, Zener and Transistors in both directions up to max. 100V
- 6-wire reed relays matrix (MUX), max. 1016 analog, non multiplexed pins

Current measurement (AC/DC) up to 100kHz  
 Capacitance 1pF to 100mF  
 Resistance 0.1 to 100MOhm  
 Inductance 10µH to 10H

## Software

### Program development

- Automatically through APG
- Via CAD data and C-LINK
- More than 65 different CAD Interfaces
- Output for fixture data

### Program debugging

Comfortable debugging within interpreter mode

### Fault localization

- Layout & Schematics - for paperless service and repair
- Layout - graphical localization of faulty elements
- Schematics - display of current version of schematics diagram
- Fault Catalogue - intelligent catalogue for localization of errors

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