



# 6TL36

## In-line test handler



Introducing the RF test into automated production lines

*fastATE* platforms are the perfect base to develop ATE solutions

6TL36 is the first test handler on the market integrating RF tests into production lines. In addition, its modular approach offers the possibility of adding more systems into a production line to work coordinated and in parallel to reduce test cycle times.

6TL36 is a high-end solution to the latest challenges set out by the IoT and the manufacturing of connected products. Electronic devices are increasingly integrating more radio frequency communications, such as Wifi or Bluetooth, and the 6TL36 test handler is the perfect answer for a quick, safe and effective production test offering high reliability results.

The 6TL36 test handler is able to perform to a device under test all the common electronics production tests (MDA, ICT, Functional Test and Boundary Scan), but it can also integrate a radio frequency shielding box providing an attenuation of 55dB/6GHz, meaning that Radio Frequency tests in the line can also be performed. With these capabilities, the 6TL36 test handler is presented as the "best fit" option to test in-line any product with any technology, including those featuring wireless protocols.

The 6TL36 platform is designed with a modular conception: up to six test handlers can be integrated together in series to meet manufacturing needs. This flexibility is achieved thanks to an independent traceability system controlling the automatic assignment of each PCBA arriving to the group of handlers to the most appropriate module, which runs a test sequence that can be implemented in many different languages (LabVIEW, TestStand, Visual Basic, C#, ATEasy etc).

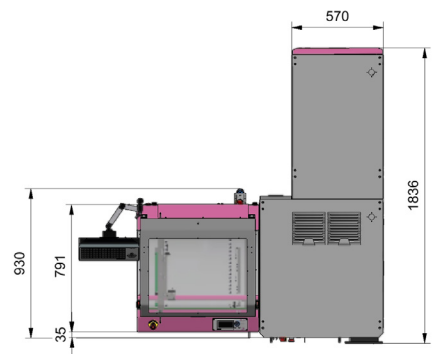
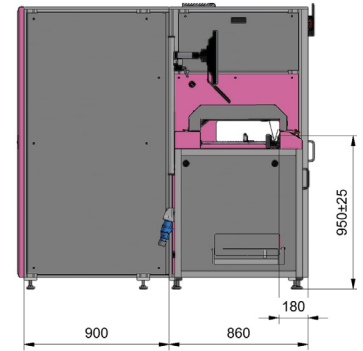
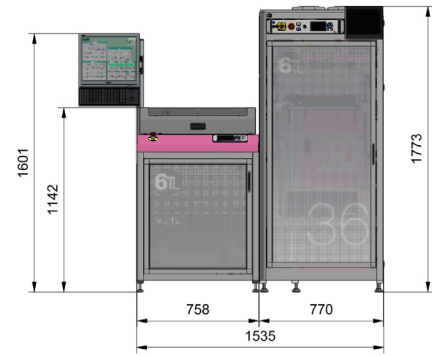
On the other hand, each test handler of the group works independently. It has its own power supply and its own controller to run the test sequences, so if any fault would occur to a single test handler it is possible to disconnect it without interfering the full operation of the group.

- FastATE technology: Modular, scalable and top flexible approach; Minimum wiring and easy maintenance; LabVIEW drivers
- Ideal for mid to high electronic production batches with 100% test station up time
- Suitable for RF test, ICT, ISP and FCT
- Multi-station (more than one handler working together) operation with by-pass and stopper-less DUT positioning
- High accuracy multi-stage servo-controlled press system, up to 4.000N
- 25-module high quality mass interconnect receiver, Virginia Panel 9025
- 20U 19" rack free space for instruments integration (PXI, ICT core, loads, power supplies...)
- Easy and Fast Fixture management: Exchange time <20s; Automatic identification for automatic software selection and automatic conveyor set-up
- High dynamics transport systems: belt speeds up to 2m/s and handling time under 2 seconds
- Phi6 Operator Interface
- CE compliant, ESD safe
- SMEMA and Hermes protocols compliant
- Options: conveyor for pallet return, light tower, input and output conveyors, data matrix kit

Features list		6TL36
General	Power Requirements	1200 VA (120..240 VAC), Single Phase, 50/60 Hz
	Weight	440 Kg
	Dimensions (WxDxH)	770 x 1798 x 1836 mm
	Compressed air	6 bar
Pushing	Press Unit	Servo actuated
	Technology	4 Linear Spindle, Ball Bearing, Push Down
	Press Force	450Kg, 1700 TPs
Fixture	InLine Fixture	Semi-Automatic, auto-engagement
	Mass Interface connector	VPC receiver, 9025 TR, 25 slots
	Number of fixture insertions	20.000
	Fixture exchange time	4s
	Fixture compatibility	For non-RF fixtures with off-line systems
	Board warp sensor	Yes
Line Integration	Bypass conveyor	Yes
	Return conveyor	Optional
	In Line management	Header Line Management (P/N: AQ580)
	Line communication protocol	SMEMA extended & SMEMA-Hermes
	Barcode reader	Yes, integrated in the Header Line Management (P/N: AQ7580)
	Conveyor height	925-975 mm (SMEMA standard)
	Conveyor width adjustment	Automatic and synchronized for all handlers in a line
	Transport speed	10-1500 mm/s
DUT	PCB size (min - max)	50" x 50" - 400x388mm (340 x 350mm for RF fixture)
	PCB thickness	3mm
	PCB exchange time	4s
	TOP and bottom contact	Yes
	Max Height Components	Top: 90mm Bottom: 30mm
Integr.	19" free rack space	31 HU
	Receiver capacity	25 slots in Fixture ITA and 4 slots in the pusher's plate

	Controller	Industrial computer
	Test rack power management	Yes, including temperature and power consumption
	Operator Interface HMI	14" touch TFT monitor & 22" TFT monitor in header (AQ580)
	Standards	CE

	P/N	Description
Test Automation	AM304	In-line test handler w/bypass conveyor.
	AP770	In-line test handler RF 6TL36, single station.
	AQ580	6TL-3X In-line header conveyor and line management
	AM307	High performance linking conveyor 765mm
	AN101	High speed lifter for pallets up to 450 x382mm
Fixturing	AN133	Kit RF 55dB from 700MHz to 6GHz with exchangeable cassette kit
	AN134	Exchangeable plates for AN133 RF applications. DUT max size 340 x 350 mm
	AT799	Fixture 6TL3x In-Line 400x382x090 9025



Kit RF 55dB from 700 MHz to 6 GHz.



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As all *fastATE* base platforms, 6TL36 features:

- 6TL YAV Modules compatibility.
- PXI chassis direct integration
- Reliable mass interconnect interface (VPC 90 series compatible)
- Short delivery time