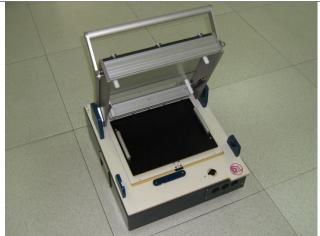


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### **6TL SmartFixture & Cassettes**



H7200671S SmartFixture

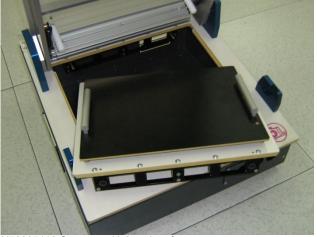


H72007115 SmartFixture with Icon Interface



Each H7200671K SmartFixture cassette includes;

- a transparent pusher plate with push fingers.
- a transparent receptacle protection plate.
- a 10mm thick probe plate.
- a 5mm thick moving plate.
- 10 Pcb push fingers and 4x Moving plate pushers.



H72007116 Cassette with Icon interface

#### The 6TL SmartFixture concept,

Is designed as a flexible modular and affordable testfixture solution for use as a standalone functional test system. The metal enclosure from the H72007115, H7200671S or H72007215 SmartFixtures are 470/750 x 490 x 100 x170 mm in size and are ergonomically formed. They offer a large internal space to build in additional electronics, including a 6TL YAVPack. The test fixture uses a robust and precise manual linear press-down system with a 12 mm linear movement to ensure a correct, friction free vertical stroke when pushing the UUT onto the test probes. The ball bearings ensure a long term, error free, smooth operation of the mechanism. The ergonomically designed arm is equipped with two gas struts to ensure an easy opening and closing of the fixture during production. When fully closed the system is locked in position until the operator lifts it again, after the test. A magnetic lock is available as option.

An easy removable aluminum backplane with a pre-tooled hole pattern to allow the installation of 6TL YAVPACK solutions is present. The aluminum backplane can be easily customized to hold any Interconnections or connectors required for connection to any external equipment or controller.

The Front panel includes a pre-tooled area to install an optional 802031Z MMI CAN bus controlled MMI (Push button and Display module) for easy operator control of the test sequence and to communicate with any build-in YAVPack.

The entire SmartFixture top, including the cassette and interface, if present, can be unlocked and opened up to 80° to allow an easy access to the internal wiring of the interface and the testprobes inside the cassette for maintenance and debug purposes. It provides also an easy access to the installed YAVPAck and additional tester electronics. The system





can be opened in any of the fixed positions of the mechanical opener. For normal service and maintenance operations this arm allows the fixture safely to be opened at 80°.

In case of a cassette with Icon Interface the board can be fixed to the cassette outside the fixture using the storage screws. Through the Icon connectors you can do any debug work without having to use the SmartFixture base unit.





Sample applications.

Sample SmartFixture with YAVPack

#### General Specifications for SmartFixture with and without Icon Interface;

- 1) Mechanical linear press-down system with 12 mm linear movement
- 2) 2000 N maximum force (1000 test probes of 200 gr.)
- 3) Exchangeable cassettes with or without VPC icon compatible interface
- 4) Maximum DUT height 60 mm (higher values require additional pusher plate milling)
- 5) Overall enclosure dimensions
  - H72007115: 470 x 490 x 100 x 170 mm (WxDxH1xH2)
  - H72007215: 750 x 490 x 100 x 170 mm (WxDxH1xH2)
- 6) Locked 80° casting fixture top plate for easy components installation inside
- 7) Removable back panel pre-tooled for a YAVPACK placement -
- 9) Pre-tooled front panel for a MMI Pushbuttons and Display Module placement
- 10) Locking system to lock the top plate with the base housing, (Key lock is optional)
- 12) Test cassettes including 10 mm isolated receptacle test probes plate, 5 mm antistatic moving plate, Removable transparent ESD safe Pushers Plate, VPC Icon compatible ITA Interconnect interface with room for up to 4 VPC iCon ITA Modules, 4 x Moving Plate Pushers, 10 x DUT Pushers, 25 x DUT Stoppers.

#### Specific specifications for SmartFixture without internal cassette interface.

1) Exchangeable cassettes NO interface and a Free UUT Test area off;

H72007116: 300 x 250 mm H72007216: 580 x 250 mm

#### Specific specifications for SmartFixture with internal Icon cassette interface.

- 1) VPC Icon compatible receiver Interface with space for up to 4 x Virginia Panel iCon Receiver Modules
- 2) Manual front rotation lever for easy connection/disconnection of the Interchangeable Test Cassettes
- 3) Modules and contacts available for Hi Volt (1.500 V), Hi Current (60 A), Electrical Signals, Serial and Parallel Buses, Coaxial RF (up to 40 GHz), Thermocouple, Pneumatics, POF fiber, Single Mode Fiber, for both receiver and ITA
- 4) Exchangeable cassettes with VPC Icon compatible ITA interface and a Free UUT Test area off;

H72007116: 300 x 250 mm H72007216: 580 x 250 mm





### **Replacement of the Cassettes**



1) Remove the two locking screws



2) Unlock the cassette from the receiver.



3) Remove the cassette.

#### Part numbers:

Pn.	Part number	Description	Picture
1	MG-6TL02 40330002 Sistel P/N: TBD	Base Mechanical test fixture with 12mm full linear engagement for max PCB size 337x250mm and a maximum of 1000 test probes (2N). The system has no Internal Interface between the cassette and the receiver (Base unit). (cassette not included)	
2	MG-6TL02 SmartFixture 41570322 Sistel P/N: H7200671S	Base Mechanical SmartFixture with 12mm full linear engagement for max PCB size 337x250mm and a maximum of 1000 test probes (2N). The system has no Internal Interface between the cassette and the receiver (Base unit). This unit is prepared to build in any YAVPack its controls will be available on the front. (cassette not included)	
3	MG-6TL02-10 40330007 Sistel P/N: H7200671K	Cassette with 10mm probe plate, 10mm Pusher plate and <u>5mm</u> thick probe protection plate, for max PCB size 337x250mm and a maximum of 1000 test probes (2N) this cassette has no interface, for use with MG-6TL02 and MG-6TL02 SmartFixture (Incl.10x push fingers + 10x PCB Support 2mm)	
4	MG-02-10 40330030 Sistel P/N: TBD	Optional cassette, same as MG-6TL02-10 but this time with an <u>8mm</u> thick probe protection plate, typical used when you have high probe count and components up to 8mm high on the bottom of the PCB.	
5	MG-6TL03 40330044 Sistel P/N: TBD	Base Mechanical test fixture with 12mm full linear engagement for max PCB size 580x250mm and a maximum of 1000 test probes (2N). The system has no Internal Interface between the cassette and the receiver (Base unit). (cassette not included)	





Pn.	Part number	Description	Picture
6	MG-6TL03 SmartFixture 41570323 Sistel P/N: H7200672S	Base Mechanical SmartFixture with 12mm full linear engagement for max PCB size 580x250mm and a maximum of 1000 test probes (2N). The system has no Internal Interface between the cassette and the receiver (Base unit). This unit is prepared to build in any YAVPack, its controls will be available on the front. (cassette not included)	
7	MG-6TL03-10 40330027 Sistel P/N: H7200672K	Cassette with 10mm probe plate, 10mm Pusher plate and 8mm thick probe protection plate, for max PCB size 580x250mm and a maximum of 1000 test probes (2N) this cassette has no interface, for use with MG-6TL03 and MG-6TL03 SmartFixture (Incl.10x push fingers + 10x PCB Support 2mm)	
		Fixtures with Icon module Interface	
8	MG-6TL02-ICO ???????? Sistel P/N: TBD	Base Mechanical test fixture with 12mm full linear engagement for max PCB size 337x250mm and a maximum of 1000 test probes (2N). The system has an Internal ICON based receiver interface (VPC ICON Mass Interconnect Modules used), between cassette and receiver (Base unit). (cassette and ICON modules not included)	
9	MG-6TL02-ICO SmartFixture 40330045 Sistel P/N: H72007115	Base Mechanical SmartFixture with 12mm full linear engagement for max PCB size 337x250mm and a maximum of 1000 test probes (2N). The system has an Internal ICON based receiver interface (VPC ICON Mass Interconnect Modules used), between cassette and receiver (Base unit). This unit is prepared to build in any YAVPack, its controls will be available on the front. (cassette and ICON modules not included)	
10	MG-6TL02-10- ICO 40330046 Sistel P/N: H72007116	Cassette with 10mm probe plate, 10mm Pusher plate and 5mm thick probe protection plate, for max PCB size 337x250mm and a maximum of 1000 test probes (2N) this cassette has an ICON compatible ITA interface, for use with MG-6TL02-ICO and MG-6TL02-ICO SmartFixture (Incl.10x push fingers + 10x PCB Support 2mm) (Icon modules are not included)	
11	MG-6TL03-ICO SmartFixture Sistel P/N: TBD	Base Mechanical SmartFixture with 12mm full linear engagement for max PCB size 580x250mm and a maximum of 1000 test probes (2N). The system has an Internal ICON based receiver interface (VPC Icon Mass Interconnect Modules used), between cassette and receiver (Base unit). This unit is prepared to build in any YAVPack, its controls will be available on the front. (cassette and Icon modules not included)	
12	MG-6TL03-10- ICO Sistel P/N: TBD	Cassette with 10mm probe plate, 10mm Pusher plate and 8mm thick probe protection plate, for max PCB size 580x250mm and a maximum of 1000 test probes (2N) this cassette has an ICON compatible ITA interface, for use with MG-6TL03-ICO SmartFixture (Incl.10x push fingers + 10x PCB Support 2mm) (Icon modules are not included)	

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13	40330500 Sistel P/N: TBD	<b>6TL MG02-10 Pusher plate 10mm</b> KASI-AS-08 ESD Coated, for use in 6TL SmartFixture with and without Icon Interface or 6TL-08 (Interface not supplied)
	100	
14	40330501	6TL MG02-10 Moving plate 5mm CEM1 AS
	Sistel P/N:	For use in 6TL SmartFixture with and without Icon Interface or 6TL-08 (Interface not supplied)
	TBD	· · · · · · · · · · · · · · · · · · ·
4.5	40000500	CTL MCCC 40 Maying grants Comma CEN4 AC
15	40330502	6TL MG02-10 Moving plate 8mm CEM1 AS
	Sistel P/N:	For use in 6TL SmartFixture with and without Icon Interface or 6TL-08 (Interface not supplied)
	TRD	





Pn.	Part number	Description Picture	
16	40330502	6TL MG02-10 Probe Plate 10mm CEM1	
	Sistel P/N: TBD	For use in 6TL SmartFixture without Icon Interface or 6TL-08 (Interface not supplied)	
17	4033050?	6TL MG02-10-ICO Probe Plate 10mm CEM1	
	Sistel P/N:	For use in 6TL SmartFixture with Icon Interface (Interface not supplied)	
	TBD		
18	40330504	6TL MG02 PCB Pusher L=56,4mm	
19	40330505	6TL MG02 PCB Pusher L=58,4mm	
20	40330506	6TL MG02 MP 5mm Plate Pusher 63x15mm	
21	40330507	6TL MG02 MP 8mm Plate Pusher 61x15mm	
22	H72008937	PCB Pusher L=56,4 mm. Package of 10 units	
23	H72008941	PCB Stopper L= 3 mm. Threaded. Package of 25 units	
24	TBD	Pushers Plate fixing screw for cassette storage, test development and debug purposes.(set of 2)	
25	TBD	Moving Plate support spring	
26	60IM00192X	Test cassette slicing guide	
27	60IM025X	Tooling Pin Steel, D=3mm, H=24mm, M3 male thread	
28	H72008923	Package of 10 units of 60IM025X	
29	H72008910	PCB guide Square corner for DUT placing. Package of two units	

ltm.	Part number	Description	Picture
1.	YAVPACKF4	YAVPack 4-Slots ITA Frame  Only for use in SmartFixture version with YAVPack.	
2.			
3.			
4.	510108126VP	Signal Module, ITA, TriPaddle, 96 Position  Only for use in SmartFixture version with YAVPack.	
6.	510151105VP	Signal Module, ITA, QuadraPaddle, 192 Position, Unloaded  Only for use in SmartFixture version with YAVPack.	
7.	510160103VP	TriPaddle Signal / Mini Power and Mini Coaxial Module, Receiver, iCon, 64/8 Position  Only for use in SmartFixture version with Icon interface.	





Itm.	Part number	Description	Picture
8.	510161103VP	TriPaddle Signal / Mini Power and Mini Coaxial Module, ITA, iCon, 64/8 Position  Only for use in SmartFixture version with Icon interface.	
9.	510160108VP	Signal Module, Receiver, TriPaddle, iCon, 96 Position  Only for use in SmartFixture version with Icon interface.	
10	510161108VP	Signal Module, ITA, TriPaddle, iCon, 96 Position  Only for use in SmartFixture version with Icon interface.	
11.	510160104VP	Mini Power and Mini Coaxial Module, Receiver, iCon, 24 Position  Only for use in SmartFixture version with Icon interface.	
12.	510161104VP	Mini Power and Mini Coaxial Module, ITA, iCon, 24 Position  Only for use in SmartFixture version with Icon interface.	
13.	910112104VP	Tool, Extraction, Mini Power/Mini Coaxial/Mini Pneumatic Contacts, Receiver and ITA	
14.	910110102VP	Tool, Extraction, TriPaddle and Thermocouple, Receiver and ITA	
15.	510160101VP	Signal Module, Receiver, QuadraPaddle, iCon, 160 Position, for Crimp Contacts  Only for use in SmartFixture version with Icon interface.	





ltm.	Part number	Description	Picture
		Signal Module, ITA, QuadraPaddle, iCon, 160 Position	
16.	510161101VP	Only for use in SmartFixture version with Icon interface.	•
17.	910110111VP	Tool, Extraction, QuadraPaddle, ITA	0
18.	910110112VP	Tool, Extraction, QuadraPaddle, Receiver	
18.	7-121962124-020VP Also available in 20" and 72" lengths.	Signal, ITA, QuadraPaddle (5 Amps)  22 AWG White XLPVC (5 Amps)  Signal  [0.914m]  036in.  Connection between YAVPAck ITA connector 510151105VP and Quadrapa Modules	I, Receiver, QuadraPaddle (5 Amps)
20.	7-105966124-036VP Also available in 20" and 72" lengths.	Signal, ITA, TriPaddle (7 Amps)  26 AWG White XLPVC (1.5 Amps)  Signal  [0.914m] 036in.  Connection between YAVPAck ITA connector 510108126VP and quadrapa Modules	I, Receiver, QuadraPaddle (5 Amps)
21.	7-121962000-036VP Also available in 20" and 72" lengths.	Signal, ITA, QuadraPaddle (5 Amps)  22 AWG White XLPVC (5 Amps)  [0.914m]  036in.  Wiring between Icon ITA interface quadrapaddle module and receptacle	
22.	7-106966106-036VP Also available in 20" and 72" lengths.		Signal, Receiver, TriPaddle (7 Amps)
23.	7-105966000-036VP Also available in 20" and 72" lengths.	Signal, ITA, TriPaddle (7 Amps)  26 AWG White XLPVC (1.5 Amps)  [0.914m] 036in.  Wiring between Icon ITA interface tripaddle module and receptacle	
24.	7-106966123-036VP Also available in 20" and 72" lengths.	Signal, Receiver, TriPaddle (7 Amps)  26 AWG White XLPVC (1.5 Amps)  [0.914rm]  036in.  Connection between YAVPAck ITA connector 510108126VP and tripaddle	Signal, ΠΑ, QuadraPaddle (5 Amps)



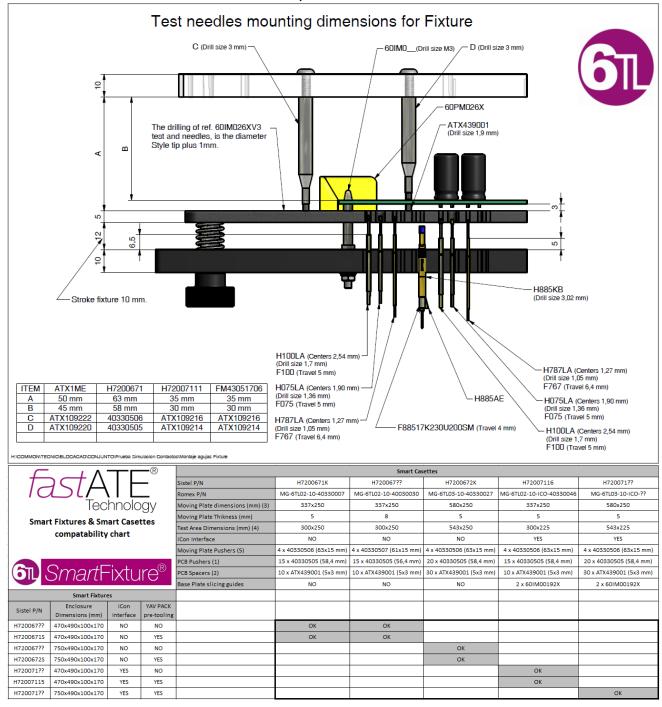


ltm.	Part number	Description	Picture
25.	MM77979201	USB → CAN Converter used to controll /calibrate any YAVModule directly from a PC with the supplied Phi6 Explorer software. Can also be used to program any YAVModule using Labview, TestStand, or any other application with the from 6TL available drivers.	
		Optional YAVPack to turn any fixture into a SmartFixture, The YAVPack Bundles (YPB) are compact embedded testing solutions, used to configure low cost standalone functional test systems.	YAVPack00 Content.
		Every YPB is a combination of the following devices assembled inside a compact 4-slot chassis:  - Standard YAV modules - Power supply	
26.	Optional YAVPacks	- Cycles counter - Man Machine Interface (MMI) visit <a href="www.6TLEngineering.com/6tl/yavpacks">www.6TLEngineering.com/6tl/yavpacks</a> for more information.	195CSCEEN SOIL of CON-LOW Press and load UN-Cally Technical Menual





### Test cassette dimensional information;



For more information please contact our agent in the Benelux.



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