MMIHF-SERIES

MECHANICAL, ERGONOMIC,
HIGH FREQUENCY

ATX Hardware

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Imprint

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SPECIALIST FIXTURE SOLUTIONS

ATX is Europe´s market leader in the manufacture of test fixtures for electronic test procedures.
Why you too should choose an ATX fixture - it´s simple:

TECHNICAL KNOW-HOW

Our sales team is technically well versed - our consultants are selected from the design team or other technical departments.

PROJECT KNOW-HOW

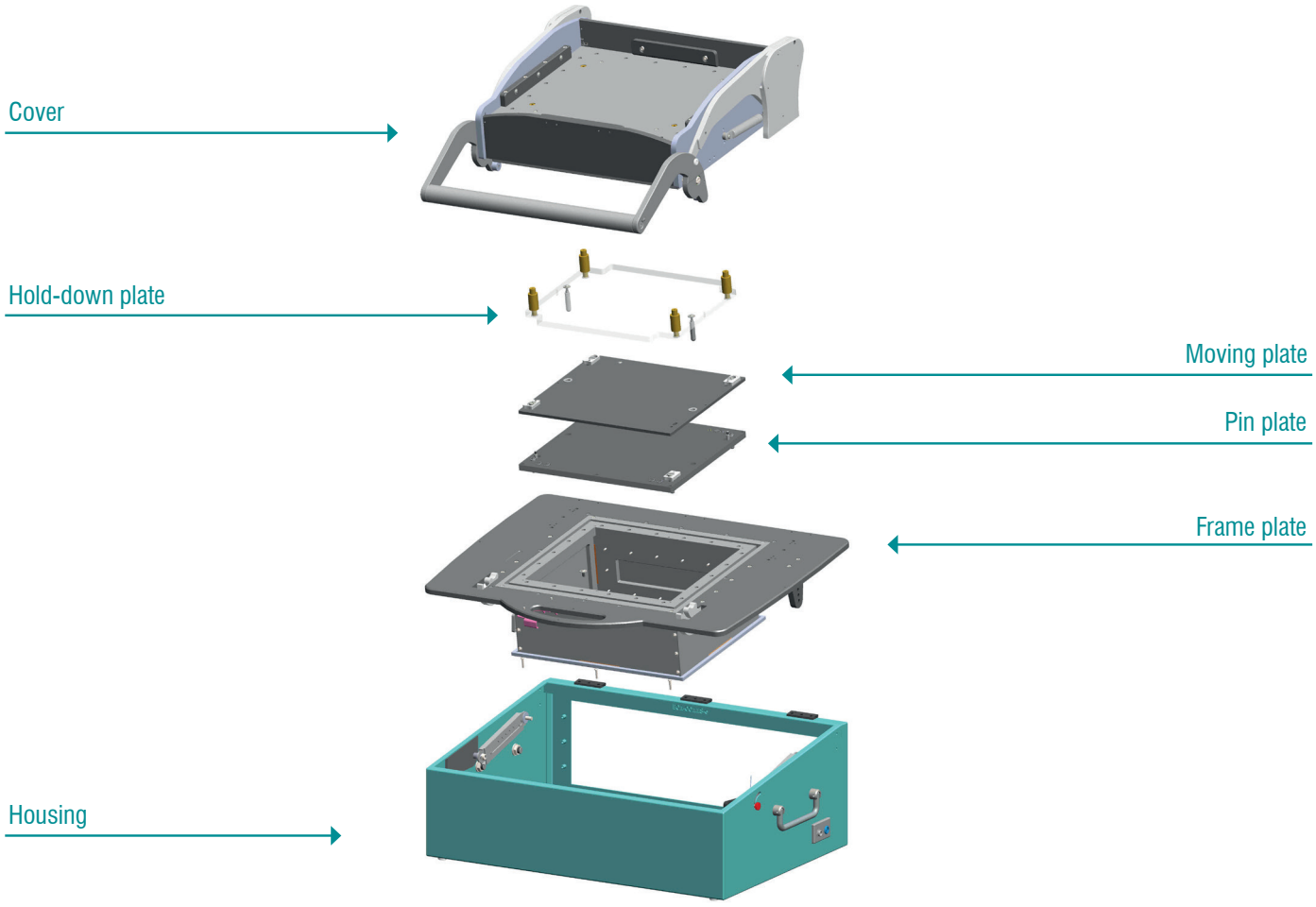
We work together with you towards a common goal: to find and implement the optimal solution for your individual testing requirements.

KNOWLEDGE BASE

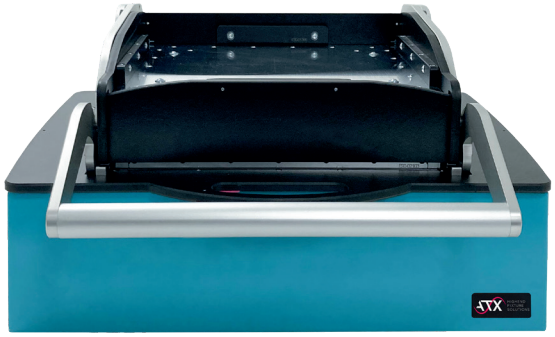
Our employees bring well over 1,000 man-years of fixture building experience to the team.

SINCE 1997

FIXTURE ASSEMBLY



MECHANICAL HIGH FREQUENCY FIXTURE



HIGHLIGHTS

- Optimium shielding
- Mature technical base
- Resilient & durable
- Manual operation
- Customizable

MMIHF - MECHANICAL HIGH FREQUNCY FIXTURE

Fail-safe measurement of high frequency

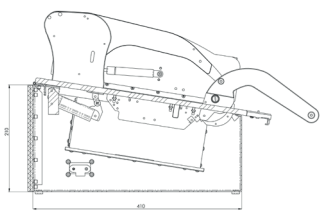
For tests in the high-frequency range, it is important to reliably protect your DUTs against interference radiation from the environment. In parallel, your test procedures must not affect the environment. With its improved shielding effectiveness and new HF seals, you can play it safe with the MMIHF - in both directions. Because it allows you to test sensitive and transmitting assemblies - even those with a transmitter/receiver combination - in detail without risking consequences for your production. At the same time, interference on sensitive assemblies can be reliably ruled out. During the development, we have oriented ourselves on the well-proven MMI mechanics of ATX. Thus we provide you, the user, with a solution that is easy to operate by hand. We deliberately do without a drive in order to enable safe and solid testing in a robust system.

In ATX‘s MMIHF fixture, the needle bed is completely shielded both above and below the needles by an aluminum Faraday cage. The opening hood has reliable HF seals. If this strong standard shielding is not sufficient, we can integrate additional attenuation mats into the instrument. All test leads are routed to the outside via filtered connectors. By simply closing the hood, modules can be contacted simultaneously.

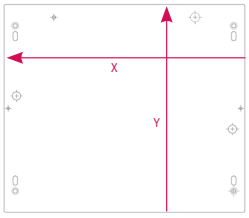
What also distinguishes our MMIHF is its sophisticated technical concept, with which you benefit not only from maximum availability but also from maximum investment security. The MMIHF is available in several sizes on the basis of inexpensive standard kits. If you wish, we can also further customize these high-quality test devices for your specialized application.

STAND ALONE FIXTURE LEGENDE

Mechanical high frequency fixture



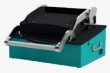
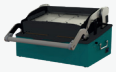
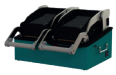
MMIHF-Standard height



Moving plate dimension X x Y

MECHANICAL HIGH FREQUENCY FIXTURE

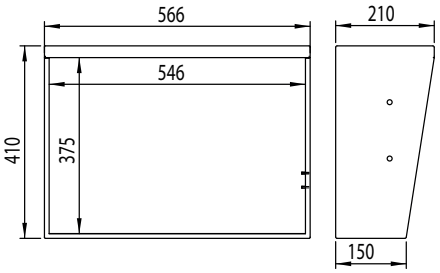
ONE-CHAMBER FIXTURE I DOUBLE-CHAMBER FIXTURE

Designation	Fixture	Moving plate (X x Y)	Standard housing	Order number
MMIHF-B		290 x 250	E01-00118	100223
MMIHF-C		420 x 250	E01-00133	100240
MMIHF-A-DO-1		2x 122 x 250	E01-00118	100229
MMIHF-A-DO-2		2x 122 x 250	E01-00118	100230

AVAILABLE HOUSING TYPES

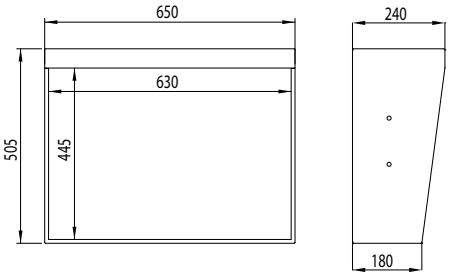
FOR MMIHF TO FIT FLEXIBLY INTO YOUR TEST ENVIRONMENT

Housing with back panel (connectors can be mounted as required)



E01-00118

Standard housing for MMIHF-B, MMIHF-A-DO-1, MMIHF-A-DO-2



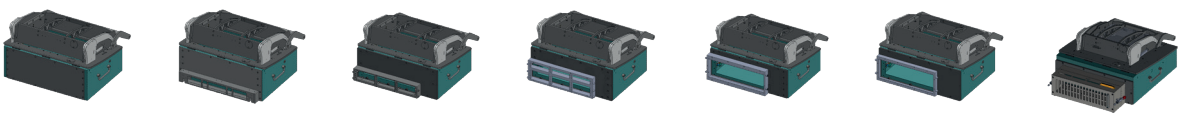
E01-00133

Standard housing for MMIHF-C

INTERFACE

POSSIBILITY OF MOUNTING AN INTERFACE ON THE REAR WALL

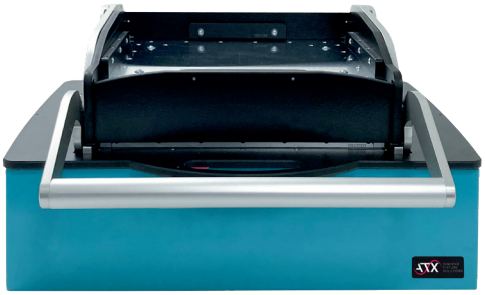
The GFK-Aperture is installed in our test fixtures as standard. All other interface mounting options can be ordered with or without the respective interface.



Interface / Housing	GFK-Aperture	Pylon	VPC G12	VPC G12X	VPC G20	VPC G25	Reinhardt
E01-00118	x	x	x	x	x	x	
E01-00133	x	x	x			x	

The assignments shown above are standard designs. However, due to our high variety of housings, special designs can be made after conultation.

CERTIFIED SHIELDING EFFICIENCY



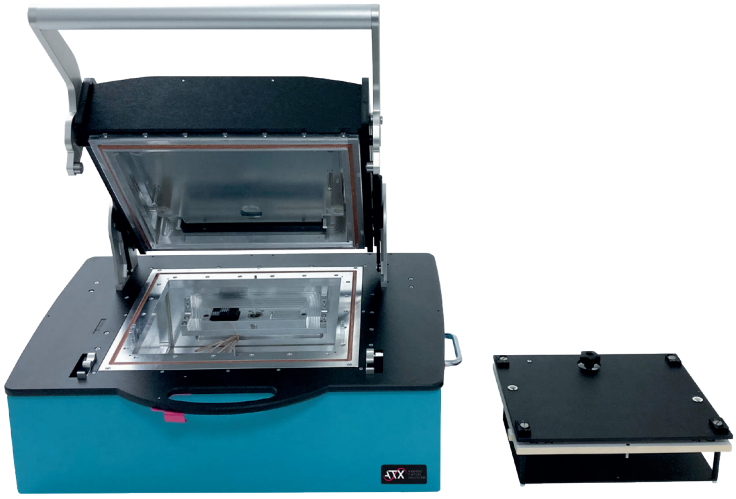
MMIHF - SHIELDING EFFICIENCY

Typical test values for different frequency bands

In the field of high frequency we have invested a lot and can therefore run reliable measurement results, which have been confirmed by the „Fraunhofer Institute IVI“.

Frequecy band [GHz]	Application	Max. shielding effectiveness [db]
0,791 - 0,821	LTE (DL)	84 db
0,832 - 0,862	LTE (UL)	84 db
0,865 - 0,868	RFID	80 db
0,880 - 0,915	GSM 900 (UL)	94 db
0,925 - 0,960	GSM 900 (DL)	88 db
1,710 - 1,785	GSM 1800, LTE (UL)	90 db
1,805 - 1,880	GSM 1800, LTE (DL)	81 db
1,880 - 1,900	DECT	79 db
1,920 - 1,980	UMTS (UL)	79 db
2,110 - 2,170	UMTS (DL)	83 db
2,400 - 2,4835	WLAN-1	82 db
2,400 - 2,500	ISM-Band	82 db
2,500 - 2,570	LTE (UL)	84 db
2,620 - 2,690	LTE (DL)	80 db
3,410 - 3,594	WiMAX	71 db
5,150 - 5,725	WLAN-2	77 db
5,725 - 5,875	ISM-Band	64 db
5,850 - 5,925	WLAN-3	62 db

MECHANICAL HIGH FREQUENCY EXCHANGE SYSTEM



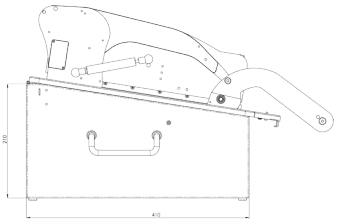
MMIHFW - MECHANICAL HIGH FREQUENCY EXCHANGE

HF shielded testing even more economical

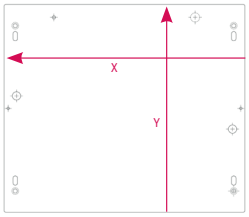
With the MMIHF exchange system, we offer an economical exchange system that makes it possible to keep the shielding cage and the mechanics as the basic unit when changing assemblies and thus to exchange only one cost-effective and, above all, space-saving cassette.

EXCHANGE SYSTEM LEGEND

Mechanical high frequency exchange system



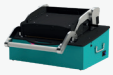
MMIHFW-Standard height



Moving plate dimension X x Y

MECHANICAL HIGH FREQUENCY EXCHANGE SYSTEM

MECHANICAL HIGH FREQUENCY EXCHANGE BASIC UNIT

Designation	Fixture	Moving plate (X x Y)	Standard housing	Order number
MMIHFWG-B		290 x 250	E01-00118	100245
MMIHFWG-C		420 x 250	E01-00133	100263

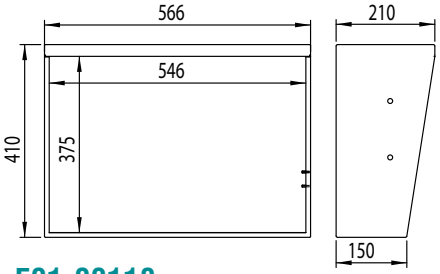
MECHANICAL HIGH FREQUENCY EXCHANGEABLE CASSETTE

Designation	Cassette	Moving plate (X x Y)	Order number
MMIHFWK-B		290 x 250	100264
MMIHFWK-C		420 x 250	100265

AVAILABLE HOUSING TYPES

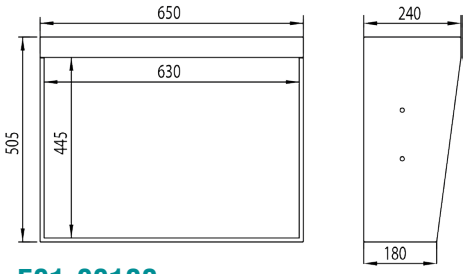
FOR MMIHFW TO FIT FLEXIBLY INTO YOUR TESTE ENVIRONMENT

Housing with back panel (connectors can be mounted as required)



E01-00118

Standard housing for MMIHFWG-B



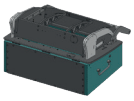
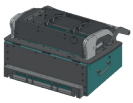
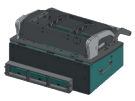
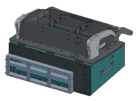
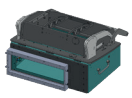
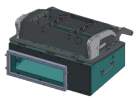
E01-00133

Standard housing for MMIHFWG-C

INTERFACE

POSSIBILITY OF MOUNTING AN INTERFACE ON THE REAR WALL

The GFK-Aperture is installed in our test fixtures as standard. All other interface mounting options can be ordered with or without the respective interface.


Interface / Housing	GFK-Aperture	Pylon	VPC G12	VPC G12X	VPC G20	VPC G25	Reinhardt
E01-00118	x	x	x	x	x	x	
E01-00133	x	x	x			x	

The assignments shown above are standard designs. However, due to our high variety of housings, special designs can be made after consultation.

FIXTURE CONFIGURATOR

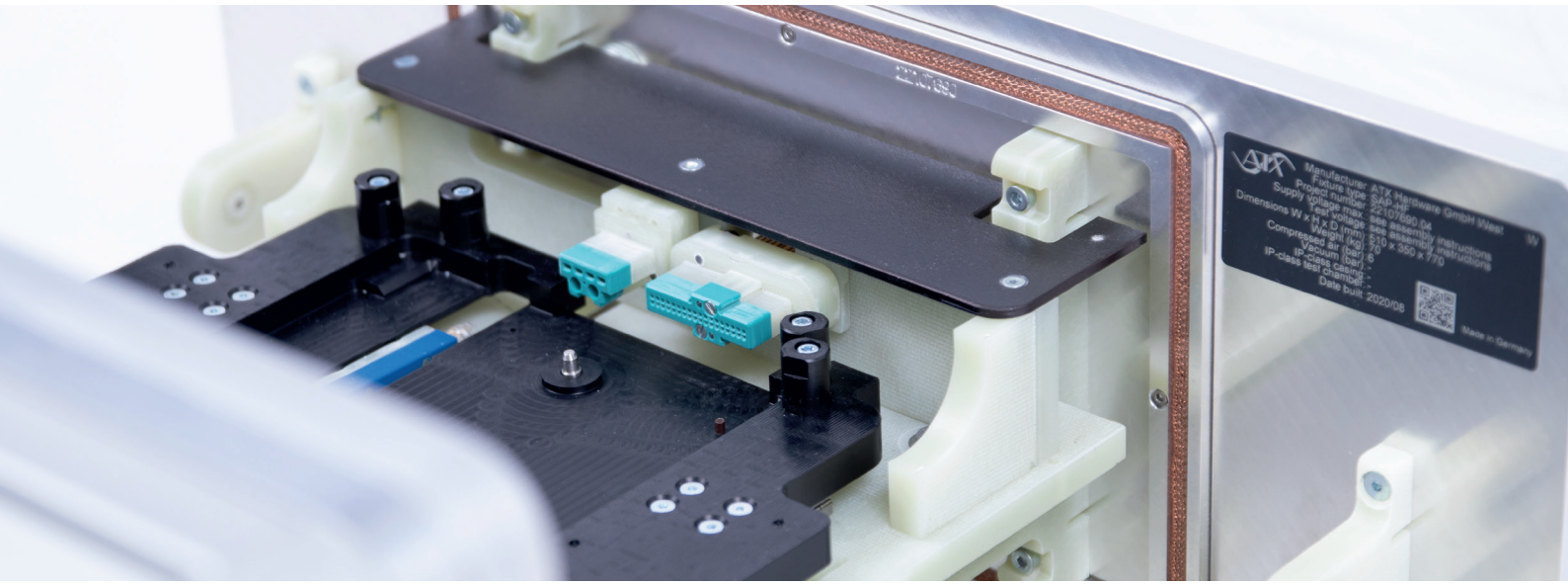
CONFIGURE YOUR INDIVIDUAL TEST FIXTURE

MMIHF-Series

Our fixture configurator was developed especially for you. Together with our sales specialists and designers, it is constantly adapted and further developed. Configure your individual test fixture now, which is specially adapted to your needs, on our homepage and receive your exclusive offer.

Go to the configurator (https://www.atx-hardware.de/en/product-category/mechanical_fixtures/mmihf-mechanical-ergonomic-high-frequency/)

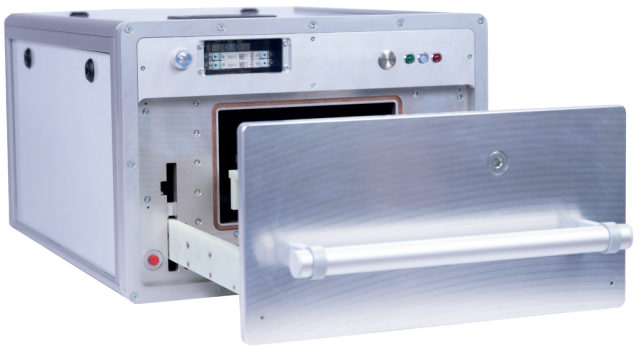
HF-DRAWER FIXTURE



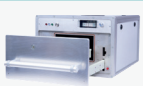
HF-DRAWER FIXTURE

Shielded testing with the HF-drawer fixture

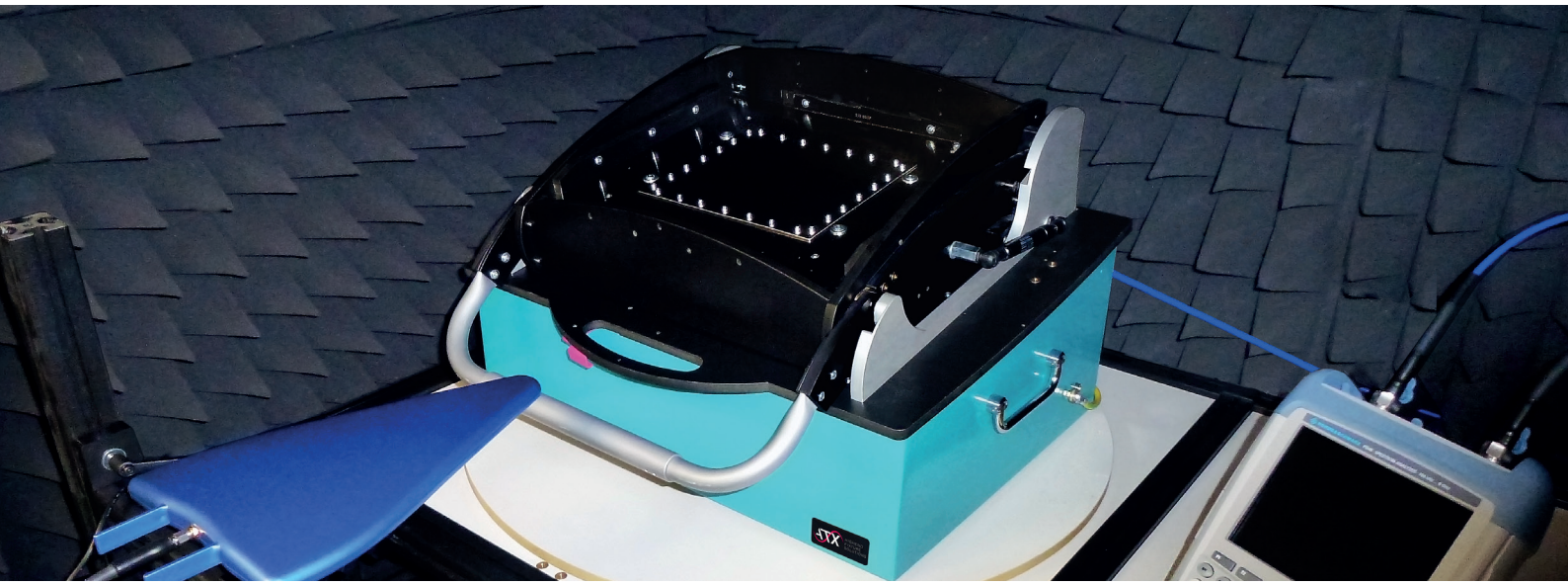
Especially for automated operation with a loading robot. The ATX RF drawer can open and close autonomously and is therefore ideal for fully automated production. However, it can be operated just as well by hand by personnel, thus enabling flexible mixed operation. Due to the stackability, multitest stations can easily be set up on the smallest footprint. For changing products the contacting is easy to exchange. In spite of complete HF shielding, service flaps allow maintenance-friendly access.



TESTING OF SEVERAL ASSEMBLIES AT THE SAME TIME

Designation	Fixture	Moving plate (X x Y)	Order number
HF-drawer		290 x 250	100269

HF-MEASURING CHAMBER



HF-MEASURING CHAMBER

Testing HF shielding

Standardized final checks are important, but they are not sufficient for an accurate result for the HF fixture! Therefore, at ATX you will find a dedicated RF measurement chamber for an accurate end test result of your HF fixture. By shielding undefined interferences, we can achieve meaningful results in the measurement of the shielding effectiveness specifically.

The entire HF chamber is covered with absorbers and thus avoids unwanted reflections of radio signals. Vectron network analyzers, various transmit and receive antennas, amplifiers and extensive accessories are available as measurement equipment. In a bandwidth of 800 MHz to 60 GHz, the attenuation of the removed adapter can be determined and documented.

SPARE PARTS

Filtered high frquency connectors

Sub-D receptacle connector

Order number	Designation
524103	D-Sub-plug-in-connector 56-701-013

USB 2.0 Feedthrough

Order number	Designation
551113	RI 4185 Single USB 2.0 480 Mbps feedthrough filter
551118	RI 4181 Dual USB 2.0 480 Mbps feedthrough filter

LAN 1 Gpbs Feedthrough

Order number	Designation
551119	RI 4182 LAN 1 Gpbs feedthrough filter

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