



AN133/AN134

In-Line RF Fixture with Interchangeable plates cassette

Lowering costs in RF testing

The great contribution of this RF fixture is the possibility of using the tools of various products, thus not having to invest in other confinement chambers.

The cassettes are interchangeable in a few minutes and their dimensions are standardized and independent of the size of the PCB

The position of the PCB is controlled by a precision laser barrier,

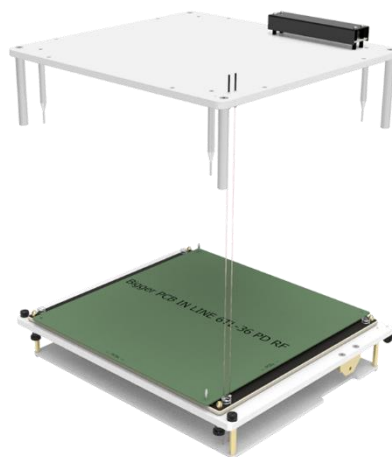
fast response, to maintain the high dynamics of the transport and the precision in the centering.

Isolated RF chamber for suppressing external interference suited for acoustic (microphone and speaker) and optic (video camera) test

For testing LTE, GSM, UMTS, GSM, GPS, Bluetooth, WLAN, WIFI.



AN133



AN134

Order information

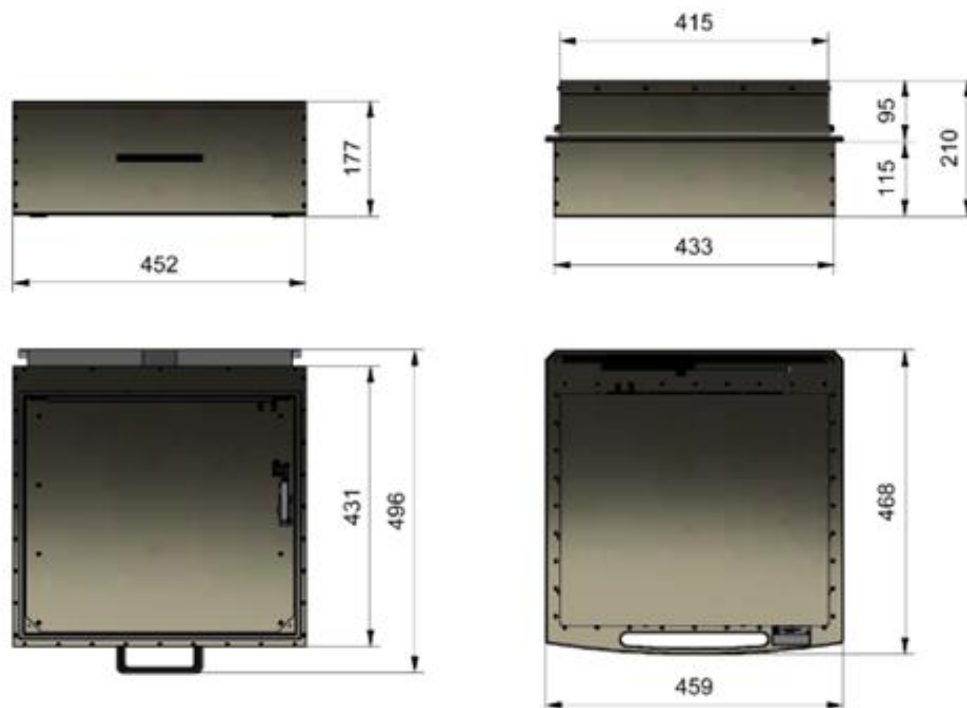
Part Number	Description
AN133	RF Fixture kit w/VPC ITA Frame 9025 - Interchangeable plates cassette kit AR707 - Laser sensor (transmitter and receiver heads) - Kit of 10 Spacers and 10 bottom supports
AN134	Interchangeable plate cassette kit 2x CAN Bus fixture ID, cycles counter and Laser sensor P/N AR313

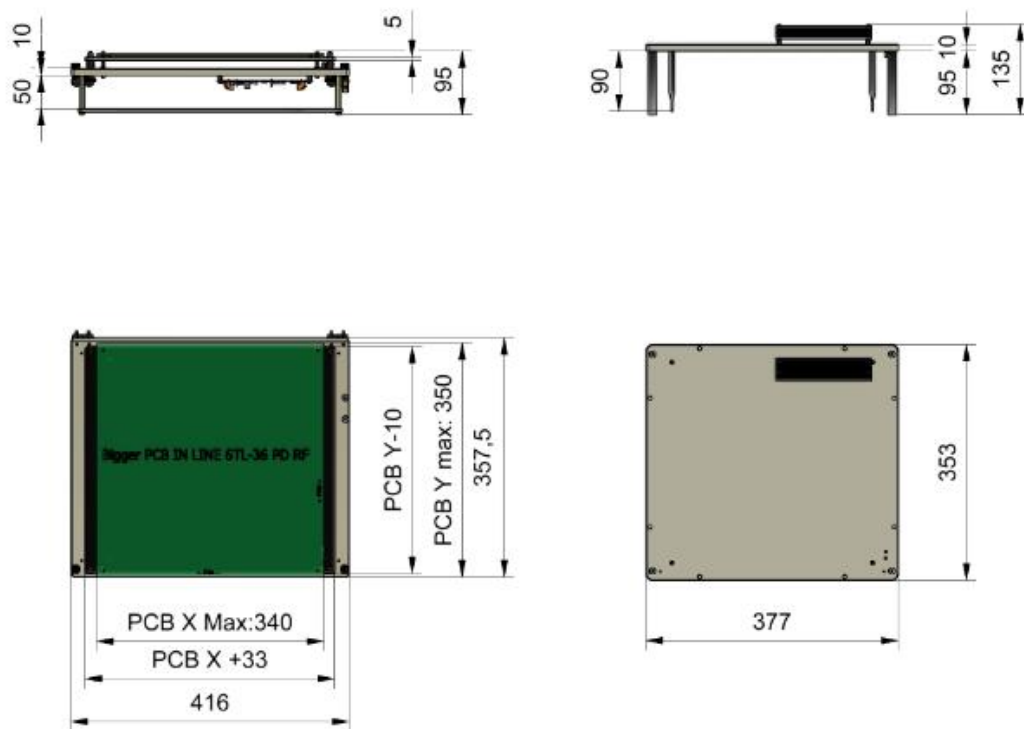
Parameters	Conditions	Value	Units
RF Shielded without absorber	300 KHz... 3 GHz	>55	db
RF Shielded with absorber	300 KHz... 3 GHz	>65	db

Integration products P/N

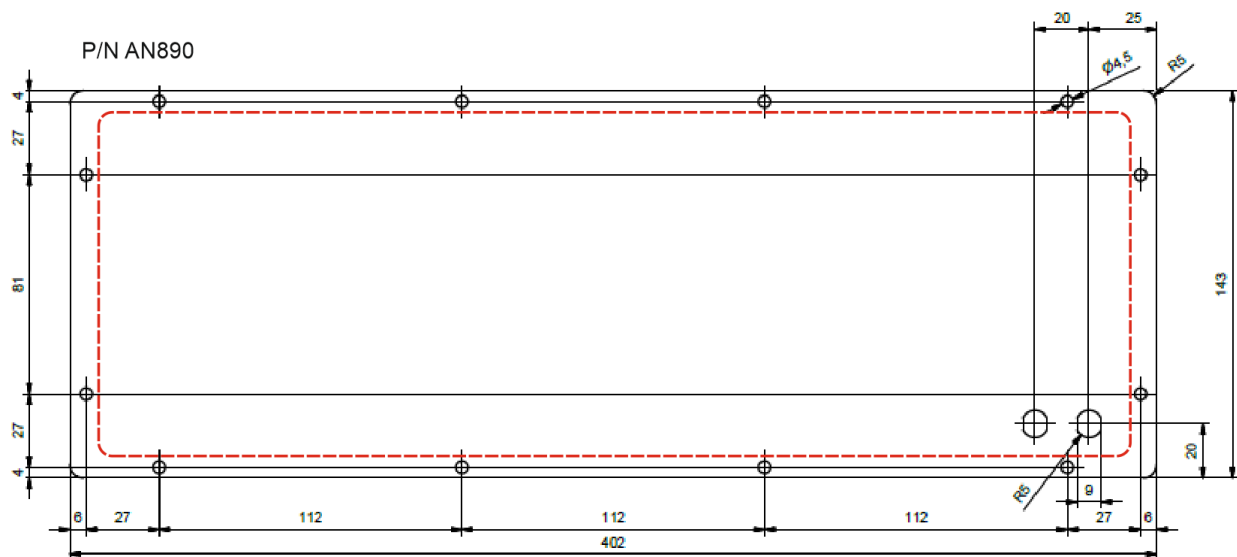
Part Number	Description
AM953	Tooling pin D= 2,5
H72008923	Tooling pin D= 3
ATXFS40	Tooling pin D= 4
H72008937	Pushers aluminium D=10 L=56 mm kit (10 u)
H72008941	3mm Diameter Spacer Kit (25 u)

Dimensions Fixture AN133 and Interchangeable Cassette AN134





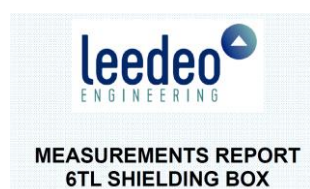
RF Filters plate



Integration filters and feedthrough connectors

Part Number	Item	Max. Data
372969	Universal USB I/O connector, up to 10 Gbit/s	
AT009	Universal Ethernet RJ45 I/O connector, up to 10 Gbit/s	
AT012	HDMI Shielded I/O connector (>90 dB)	
Under request	DB 9 10PF Shielded	Up to 400 Mbps
372961	DB 9 100PF Shielded	Up to 150 Mbps
372965	DB15 100PF Shielded	
372958	DB25 100PF Shielded	
Under request	DB25 100PF Shielded	
Under request	DB50 310PF Shielded	
3723940642	BNC 50 Ohm Feedthrough connector	
3721123270	BNC 75 Ohm Feedthrough connector	
AG113	SMA 50 Ohm Feedthrough connector	
Under request	SMA 75 Ohm Feedthrough connector	
Under request	TNC 50 Ohm Feedthrough connector	
Under request	F 50 Ohm Feedthrough connector	
Under request	N 50 Ohm Feedthrough connector	
372964	Pneumatic Feedthrough connector	

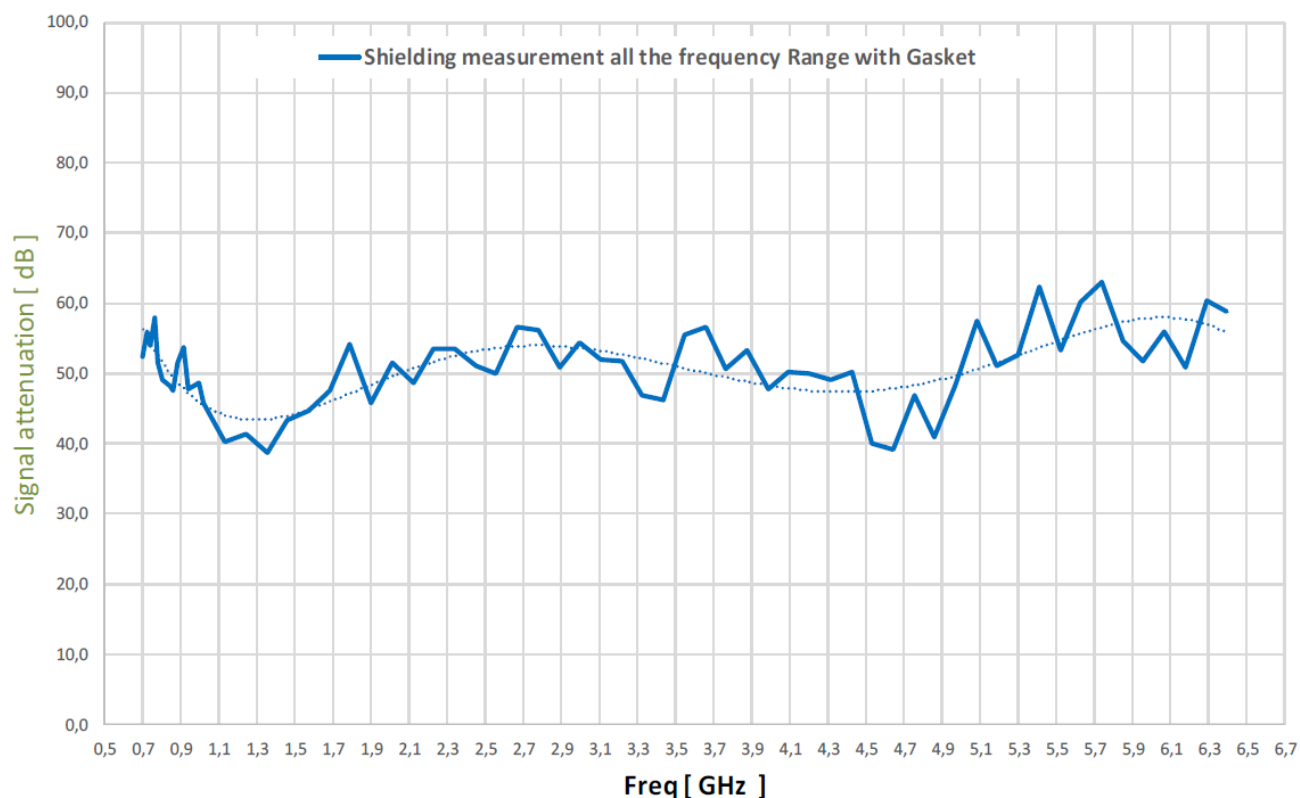
External certification body characterization results for AN133



The shielding measurements have been done with the instrumentation showed in the following table:

Device		Model
Shielding effect measurement		
VNA 2 ports	National Instruments	PXLe-5632
Automatic Calibration kit	National Instruments	782364-01
50 high frequency coax cable (x2)	Johnson	RG-316 (0,5 m)
50 high frequency coax cable	Molex	Temp-flex (0,3 m)
Log-periodic reference antenna	Aaronia	HyperLOG 6100
Standard broadband dipole Antenna 50	Aaronia	OmniAntenna

Shielding effect measurement [dB]



As a summary table for the attenuation obtained on the most important frequencies:

Frequency Band	Attenuation [dB]
LTE (700 MHz)	57
GSM (900 MHz)	50
UMTS(2100 MHz)	50
WIFI (2400 MHz)	55
WIFI (5 – 6 GHz)	57

Important warning

The design of the AN133 has been modified to facilitate the "snap-in" connection of the needle bed with the input signals from the camera. This is only possible for certain filter connectors. Disconnecting other connectors may require manual operation. The connector pass-through panel has a useful surface of 300x90 mm in which two DB9 connectors with filter are installed, in addition there are 8 fixed coaxial connectors for RG316 (> 6GHz).

