Air Interface Adapter AIAD-6/2-Diplex

MTS-No.: R60.90.0380

Application

With the MTS AIAD you can emulate air interfaces for all imaginable scenarios. To avoid the influence from the live-net, the signals can be connected with cables directly from the different signal sources, as for example GSM or UMTS base stations or signal generators etc. over the MTS AIAD to mobile devices.

Description

The Air Interface Adapter series AIAD is our most flexible solution for an air interface emulation. With the AIAD it is possible to emulate the in- and outputs according to the demands of the customer. The design allows program controlled attenuation of each input signal to each output signal at the same time. The function is carried out by power dividers on the input lines which lead through programmable attenuators to output combiners.

Characteristics

- 6 inputs coupled to 2 outputs through 93 dB attenuators
- Frequency range from 800 MHz to 2500 MHz
- Attenuation range from 0 dB to 93 dB in 1 dB steps
- Switching time up to 10 ms
- The RX/TX paths can be separated by built-in diplexers for GSM900 and GSM1800
- Remote control by RS-232, IEEE488 interface and LAN (other interfaces on demand)
- High quality materials and components for extended durability
- Air Interface Adapters can be designed according to customers individual requirements

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Certified with DIN EN ISO 9001:2000

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Configuration:

6 inputs coupled to 2 outputs through 93 dB attenuators

Technical data:

1 RF-specifications Matrix In 1-6 / Out 1-2:

1.1	Impedance	50 Ω
1.2	Input power	+30 dBm max.
1.3	Frequency range	800 MHz – 2500 MHz
1.4	RF-connections	N female
1.5	Switching time	50 µs max.
1.6	VSWR In	2 : 1 max.
1.7	VSWR Out	2 : 1 max.
1.8	Isolation	On request
1.9	Insertion loss Node/B - MS	25 dB typ., 27 dB max. (at 0 dB attenuation)
1.10	Attenuation	0 dB – 93 dB in 1 dB steps
1.11	Gradation	1 dB / 2 dB / 4 dB / 8 dB / 16 dB / 30 dB / 32 dB
1.12	Setting accuracy	1 dB ±0,4 dB 2 dB ±0,8 dB 3 dB - 9 dB ±1,0 dB 10 dB - 29 dB ±1,5 dB 30 dB - 79 dB ±3,0 dB 80 dB - 89 dB -3,0 dB / +6,0 dB 90 dB - 93 dB ±6,0 dB

2 RF specifications Diplex Filter GSM900

2.1	Bandwidth Rx	880 MHz – 915 MHz
2.2	Band widthTx	925 MHz – 960 MHz
2.3	Insertion loss	3 dB max.
2.4	VSWR	1,5 : 1 max.
2.5	Isolation	65 dB min.

3 RF specifications Diplex Filter GSM1800

3.1	Bandwidth Rx	1710 MHz – 1785 MHz
3.2	Band widthTx	1805 MHz – 1880 MHz
3.3	Insertion loss	2,5 dB max.
3.4	VSWR	1,5 : 1 max.
3.5	Isolation	75 dB min.

4 Connections:

4.1	Front side	Power supply switch with integrated control lamp RF-connections
4.2	Rear side	Power supply Control card Appliance plug with the integrated fuses F1 and F2 Ground connector Control interfaces

5 General specifications:

5.1	Power supply	100 V – 240 V 50 Hz / 60 Hz
5.2	Internal voltage	5 V DC
5.3	Control displays	Control lamp in power switch Control LED for 5 V DC at the power supply unit
5.4	Control interfaces	LAN IEEE488 interface RS-232
5.5	Power consumption primarily	0,04 A typ. @ 230 V
5.6	Voltage supply	Standard rubber connector
5.7	Operating temperature	0 °C – +50 °C
5.8	Reference temperature for specifications	+25 °C
5.9	Dimensions	19''-unit x 6 HU x 370 mm (dimensions without handles and connections)
5.10	Colour	Front side colourless anodized Rear side colourless anodized
5.11	Weight	18,0 kg

6 Delivered parts:

AIAD-6/2-Diplex
Power cable
Operating manual (on CD)

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7 Comments:

Warranty	12 months
RoHS-compliant	Yes

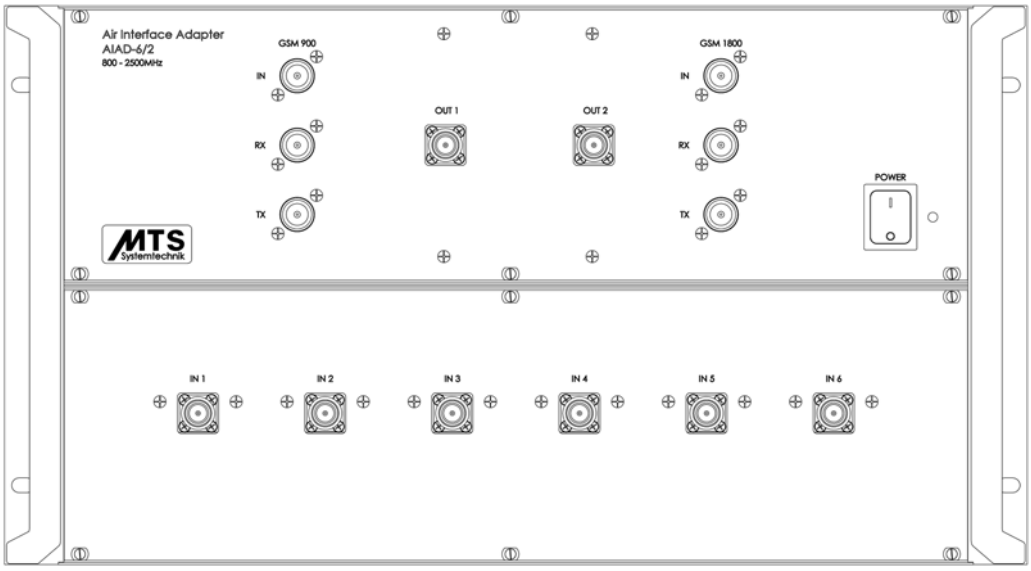
8 Recommended accessories:

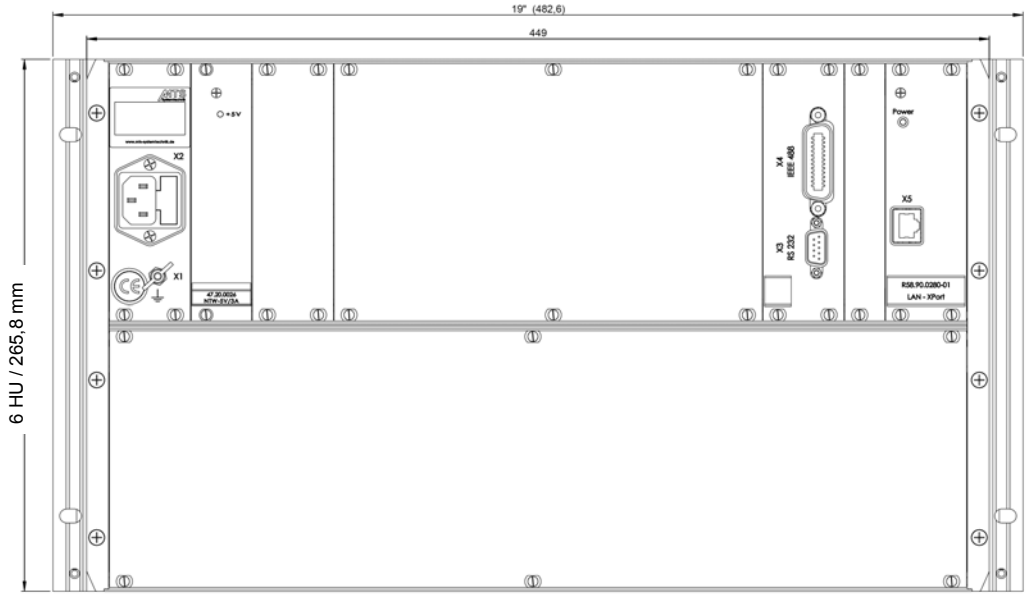
Shielding box of the series MSB-02xx

RF-cables

Control software

Views





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