

## Air Interface Adapter AIAD-6/6-TTL

MTS-No.: R60.90.0251-03

### 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.

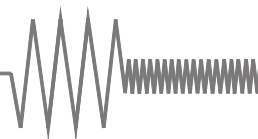
### Description

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 6 outputs through 93 dB attenuators
- ▶ Frequency range from 1800 MHz to 2400 MHz
- ▶ Attenuation range from 0 dB to 93 dB in 1 dB steps
- ▶ Remote control by LAN (other interfaces on demand)
- ▶ Switching time up to 50  $\mu$ s
- ▶ High quality materials and components for extended durability
- ▶ Air Interface Adapters can be designed according to customer's individual requirements



## Air Interface Adapter AIAD-6/6-TTL

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### Configuration:

6 inputs coupled to 6 outputs through 93 dB attenuators / test outputs

### Technical data:

#### 1 RF-specifications:

1.1 Impedance	50 Ω
1.2 Input power	+30 dBm max.
1.3 Frequency range	1800 MHz – 2400 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 / test	2 : 1 max.
1.8 Isolation	On request
1.9 Insertion loss	
Node/B - MS	34,5 dB typ., 35,5 dB max. (at 0 dB attenuation)
Node/B - test	5 dB max. (all attenuators have to be set to 93 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 Connections:

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

#### 3 General specifications:

3.1 Power supply	100 V – 240 V 50 Hz / 60 Hz
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3.2 Internal voltage	5 V DC
3.3 Control interfaces	LAN RS-232 (only for configuration of the LAN-interface)
3.4 Power consumption primarily	0,09 A typ. @ 230 V
3.5 Voltage supply	Standard rubber connector
3.6 Operating temperature	0 °C – +50 °C
3.7 Reference temperature for specifications	+25 °C
3.8 Dimensions	Desktop unit 84 TE x 6 HU x 425 mm (dimensions without handles and connections)
3.9 Colour	Front side colourless anodized Rear side colourless anodized
3.10 Weight	22,3 kg

#### 4 Delivered parts:

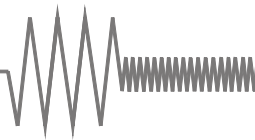
AIAD-6/6-TTL  
Power cable  
Operating manual (on CD)

#### 5 Comments:

Warranty	12 months
RoHS-compliant	Yes

#### 6 Recommended accessories:

Shielding box of the  
series MSB-02xx  
RF-cables  
Control software



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## Views:

