



Aeroflex Microelectronic Solutions

Aeroflex / Weinschel Subsystems Overview

Solution-Minded



Performance-Driven



Customer-Focused



Aeroflex - Two Core Businesses



Microelectronic Solutions (**AMS**)

Test and Measurement Solutions (**ATS**)



RFMW

Inmet, KDI, Metellics,
Nanjing, Weinschel

Aeroflex / Weinschel

The Aeroflex logo features the word "AEROFLEX" in a bold, sans-serif font, with a stylized blue swoosh above the letters. The swoosh starts as a thick line on the right and tapers to a thin line on the left, curving around the text.

AEROFLEX

- ▼ Headquartered in Frederick, MD
- ▼ Privately Owned Company
- ▼ Established in 1952
- ▼ High Performance Test & Measurement Solutions
- ▼ 34,000 Sq. Ft. Facility
- ▼ 130 Employees



Certificate No. 289I

Top Aerospace / Defense Customers

AEROFLEX



SPACE SYSTEMS
LORAL

Raytheon

LOCKHEED MARTIN



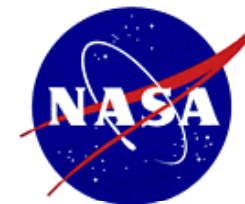
HARRIS



BAE SYSTEMS

NORTHROP GRUMMAN

GENERAL DYNAMICS



AMS Top Commercial Customers

AEROFLEX

ERICSSON  **Anritsu**

 **at&t**


CISCO

Alcatel-Lucent 

 **MOTOROLA**

intel.

 **Agilent Technologies**

Fixed Attenuators & Terminations

AEROFLEX



- ▼ Frequencies to 50 GHz
- ▼ Power levels to 1 kilowatt
- ▼ Precision VSWR/ response; low insertion loss and intermod product levels
- ▼ Both thin- and thick-film capabilities; diverse connector options; robust designs; hi-rel and space qualified

Step Attenuators



- ▼ GaAs FET, PIN, reed / edge-line and relay switched designs
- ▼ dc-1.2, 2, 3, 0.8-2.3, dc-18, 26.5 & 40 GHz
- ▼ Up to 10 BIT design
 - 127/1 dB, 110/10, 95/5, 63/1, 63.75/0.25, 31/1, 15/1, 11/1, 1.5/0.1dB and many other configurations
- ▼ 5V, 24V, TLL and SmartStep control options
- ▼ Phase compensated and latching designs available

Phase Shifters, Connectors, Splitters

AEROFLEX



- ▼ Blind-Mate connector systems
 - Planar, spring loads, 40 GHz interface (no pin or jack)
- ▼ Resistive splitters and dividers to 40 GHz in a variety of configurations
- ▼ Planar Crown connector systems
- ▼ Mechanically tuned phase shifters

Control Components



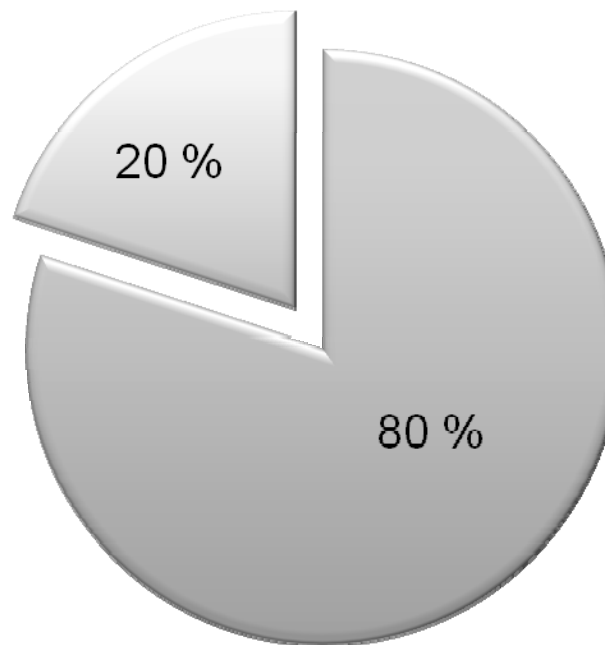
- ▼ Smart Step™
- ▼ IEEE-488, RS-232, RS-485
- ▼ Ethernet 10/100 Base T
- ▼ Ethernet 1000 Base T

Subsystems Development Activity



Catalog Products

Programmable Attenuator Units
Attenuator Controllers
Programmable Switch
802.11 Simulator
WLAN Simulator



Custom Products

Attenuation Matrices
Switch Matrices
RF Distribution Systems

Market Segments



- ▼ Wireless OEM's - Infrastructure
 - Motorola, Ericsson, Sprint
- ▼ Wireless OEM's – Radio Handsets
 - Motorola, Thales
- ▼ Government Prime Contractors
 - Northrop Grumman, Lockheed Martin, BAE, ITT, Harris
- ▼ Military
 - U.S. Navy, U.S. Army, U.S. Marine Corps
- ▼ Aerospace
 - Boeing, Orbital
- ▼ Standards Laboratories
 - NIST
- ▼ Cable Modem OEM's
 - Cisco

Motorola Subsystems Usage



- ▼ Arlington Heights, Schaumburg,
 - ▼ Attenuation Matrices, WiLAN Simulator
- ▼ Ft. Worth, Plantation, Beijing
 - ▼ Attenuation / Switch Matrices
- ▼ Horsham
 - ▼ 75 Ohm Programmable Attenuator Units
- ▼ Tel Aviv
 - ▼ Attenuation Matrices
- ▼ Arizona
 - ▼ Switch Matrices

Programmable Attenuator Units

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- ▼ Model 8310, 8311, 8312
 - Designs DC to 26.5 Ghz
 - 75 Ohm Designs
 - GaAs, FET, PIN, Edgeline Options
 - Up To 4 Input/Output Paths
 - 40 + Standard Configurations

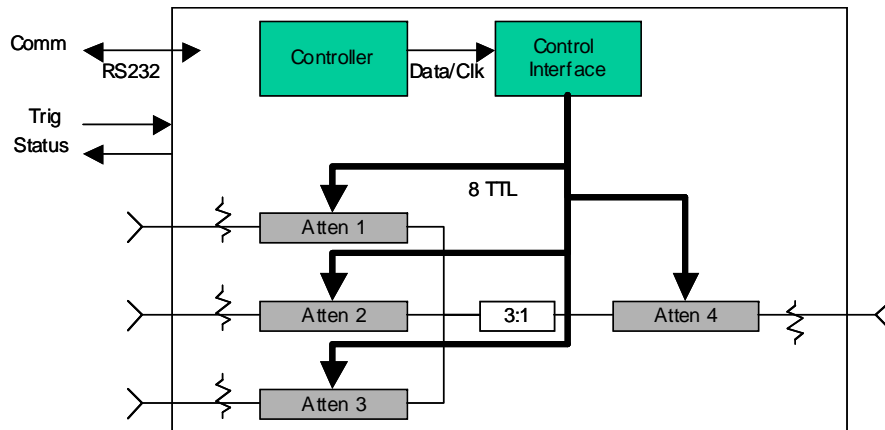


Mobile Network Simulation

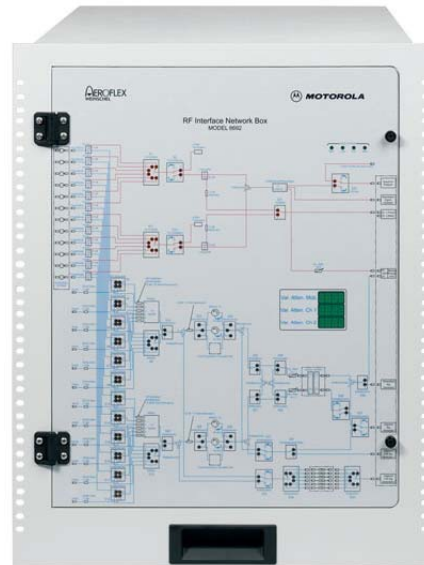


▼ Model 8314-1 & 8314-2

- Simulates Connectivity Over Distance and Speed
- 3 Bases Stations, 1 Mobile Handset
- 2 to 6 GHz
- PIN Diode Attenuator Design
- RS232 Control



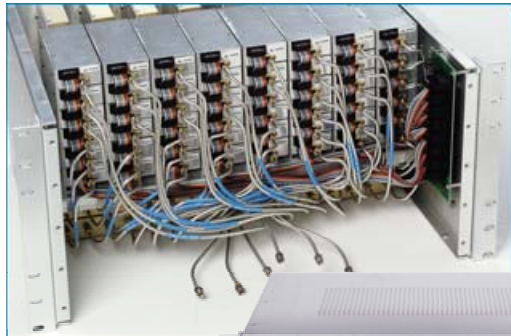
Automated Test Subsystems



- ▼ 3G Base Station Application
- ▼ Interop Verification Testing
- ▼ Base Station to Multi Vendor Handsets

Attenuation Subsystems

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- ▼ DC to 40 GHz
- ▼ Mechanical & Solid State Designs
- ▼ GaAs, FET, PIN
- ▼ Wide Dynamic Range
- ▼ Ethernet and RS-232 Control

Wireless & Cable Subsystems

AEROFLEX



- ▼ Mobile communications
- ▼ Head-end switch matrixes
- ▼ Multi-channel step attenuation for phased arrays
- ▼ 1x4, 4x4, 8x8, 8x16, 4x32 + Custom Configurations
- ▼ Modular Designs
- ▼ Hot Swappable Capabilities
- ▼ 50 and 75 Ohm Designs
- ▼ Latching designs for signal path integrity
- ▼ IEEE-488, RS-232, Ethernet Control

Satellite Communications

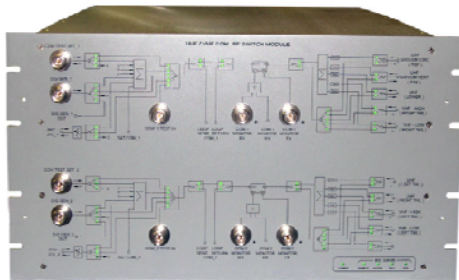
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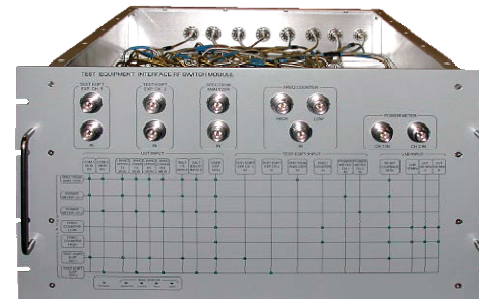
- ▼ 4 X 32 L Band Matrix
- ▼ 500 to 1500 MHz
- ▼ 0 dB Gain
- ▼ Low Noise
- ▼ High Intercept Point (IP)
- ▼ Flat Gain Across Band
- ▼ Front Panel Indicators
- ▼ Hot Swappable Modules
- ▼ Ethernet and RS-232 Control

Custom Applications

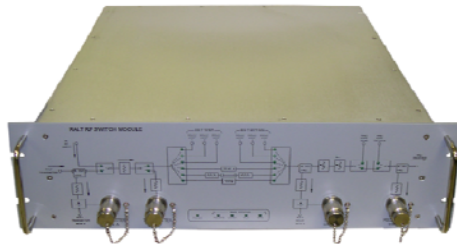
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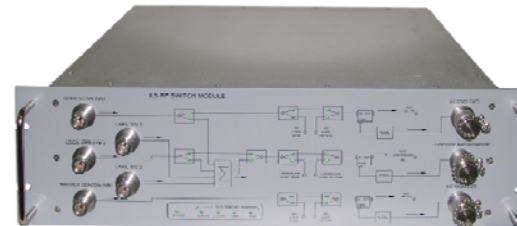
- ▼ Airborne Communications



- ▼ Test Interfaces



- ▼ Timing Delay Simulator



- ▼ RF Distribution Systems

Aeroflex / Weinschel Advantage



- ▼ 55 Years of Experience
 - Precision Measurement, Calibration
- ▼ RF Capabilities
 - Design, Engineering, Test, Manufacturing
 - Custom Designs, Build To Print, Detailed Documentation
 - Prototyping, proof of concept & low volume production
- ▼ Technical Proposal Development
 - Precision Measurement, Calibration
- ▼ Worldwide Sales Channel
 - Multi National Customer Insight
- ▼ Support
 - Customer Service
 - Program Management

Points of Contact



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