

L-Band Distributing Matrix 16²



The final product may vary from the above image depending on the options selected.

Product:

| | |
|-----------------------|---|
| DEV 1985/16x16 | 16x16 Distributing Matrix 16 ² ; 850...2450 MHz; 75 Ohm, F (f) |
| DEV 1985/16x8 | 16x8 Distributing Matrix 16 ² ; 850...2450 MHz; 75 Ohm, F (f) |

Features:

- Up to 16x20 in 2 RU
- Various Input and Output Modules
 - 75 Ohm, F (f) or BNC (f), or 50 Ohm, SMA (f)
 - Optical Inputs
- Variable Gain (MGC or AGC)
- Variable Slope
- RF Sensing
- LNB Powering, switchable 13/18 V and 22 kHz Tone
- Graphical Local User Interface
- Integrated Spectrum Analyzer
- Input Channel Redundancy
- Power Supply Redundancy
- Secure Lock Operation
- SNMP Support
- Easy to use DEV Web Interface
- Signal Recording and Data Backup Feature

Technical Data

DEV 1985 Distributing Matrix 16²

Capacity

| | | |
|----------------------------|-----------------|---------------------|
| Number of Inputs x Outputs | DEV 1985/16x16: | 16x16 (up to 16x20) |
| | DEV 1985/16x8: | 16x8 |

RF Specifications

| | |
|----------------------------|---|
| Frequency Range | 850...2450 MHz |
| Impedance, Connectors | 75 Ohm, precision F (f) |
| Damage Level | +25 dBm |
| Operational Input Level | <-5 dBm |
| Return Loss | >14 dB |
| Variable Gain | 30 dB |
| Flatness | ±4.0 dB (over entire Band) ±1.0 dB (in any 36 MHz Interval) |
| Isolation | Input/Input, Output/Output: typ. 60 dB Input/Output (Crosstalk): typ. 60 dB Off: typ. 80 dB |
| Intermodulation Distortion | <-40 dBc (two Tones @ -8 dBm) |
| Group Delay Distortion | <7 ns |
| Noise Figure | <17dB @ -40dBm Input Level |
| OP1dB | max. 0 dBm |
| Relay Type | Semiconductor |

Local Operation

| | |
|----------|---------------------------|
| Display | 2.2" Full Color (18 Bits) |
| Controls | Rotary Switch |

Remote Communication

| | |
|---|---|
| Interface (Connector) | Ethernet (RJ-45) |
| Remote Control & Surveillance (Interface) | <ul style="list-style-type: none"> • via Web Interface (Ethernet) • via SNMP (Ethernet) |

Redundant Power Supply

| | |
|-------------------|--|
| Supply Voltage | 100...240 V AC supplied by two different Lines |
| Power Consumption | Max. 100 VA |

General Specifications

| | |
|--------------------------|--|
| Size | 19" (483 mm) Width, 2 RU (89 mm) Height, ~300 mm Depth |
| Weight | ~10 kg |
| Environmental Conditions | ETS 300019 Part 1-3 Class 3.1E |

Technical Data (cont.)

Option 36 **Integrated Spectrum Analyzer**

With Option 36, the matrix is delivered with integrated spectrum analyzer functionality to be operated via Web Interface. The matrix chassis provides a dedicated external 50 Ohm, SMA (f) spectrum analyzer input port for connecting any signal to be probed.

For the technical data of the spectrum analyzer, please refer to the separate spec sheet.

Option 38 **Secure Lock Operation**

With Option 38, the matrix provides the ability of Secure Lock Operation for multiple user operation. While each user can be configured to operate dedicated inputs and outputs, Secure Lock Operation allows user X to lock a switched path while user Y cannot unlock this path to prevent unwanted service interruptions. Admin user is able to overwrite any path locked by normal users.

Option 48 **Input Channel Redundancy**

With Option 48, the matrix software provides the ability to configure redundant input channel configurations. Triggered via the integrated RF Sensing functionality an assigned redundancy channel can take over autonomously the signal transport of a main channel. The switching back to the main channel can be performed either manually or automatically.

Option 85 **4 Input Channels less**

Option 86 **4 Output Channels less**

With Option 85 or Option 86, the device is delivered with four input channels or with four output channels less. Thus, the standard configuration can be equipped with less input or output channels. This provides the flexibility to configure the device for the current requirements and to keep the option to upgrade the device to an application specific maximum size. The field upgrade can be performed by the customer by ordering the corresponding input module or output module.

Order Information

Products

| | |
|----------------|---|
| DEV 1985/16x16 | 16x16 Distributing Matrix 16 ² ; 850...2450 MHz; 75 Ohm, F (f) |
| DEV 1985/16x8 | 16x8 Distributing Matrix 16 ² ; 850...2450 MHz; 75 Ohm, F (f) |

Options

| | |
|------------|--|
| Option 20I | Change 4 Input Channels to 50 Ohm, SMA (f) |
| Option 20B | Change 4 Input Channels to 50 Ohm, SMA (f) with LNB Powering |
| Option 20O | Change 4 Output Channels to 50 Ohm, SMA (f) |
| Option 21I | Change 4 Input Channels to 75 Ohm, BNC (f) |
| Option 21B | Change 4 Input Channels to 75 Ohm, BNC (f) with LNB Powering |
| Option 21O | Change 4 Output Channels to 75 Ohm, BNC (f) |
| Option 22I | Change 4 Input Channels to Optical providing LC/APC |
| Option 23B | Change 4 Input Channels to 75 Ohm, F (f) with LNB Powering |
| Option 25 | Variable Slope (all Channels) |
| Option 36 | Integrated Spectrum Analyzer |
| Option 38 | Secure Lock Operation |
| Option 48 | Input Channel Redundancy |
| Option 85 | 4 Input Channels less |
| Option 86 | 4 Output Channels less |

Modules

(Input Modules and Output Modules for Upgrade or as Spare Part)

| | |
|-------------|---|
| DEV 13-0347 | Input Module, 4 Paths; 850...2450 MHz; 75 Ohm, F (f) |
| DEV 13-0348 | Input Module incl. LNB Powering, 4 Paths; 850...2450 MHz; 75 Ohm, F (f) |
| DEV 13-0349 | Output Module, 4 Paths; 850...2450 MHz; 75 Ohm, F (f) |
| DEV 13-0350 | Input Module, 4 Paths; 850...2450 MHz; 75 Ohm, BNC (f) |
| DEV 13-0351 | Input Module incl. LNB Powering, 4 Paths; 850...2450 MHz; 75 Ohm, BNC (f) |
| DEV 13-0352 | Output Module, 4 Paths; 850...2450 MHz; 75 Ohm, BNC (f) |
| DEV 13-0353 | Input Module, 4 Paths; 850...2450 MHz; 50 Ohm, SMA (f) |
| DEV 13-0354 | Input Module incl. LNB Powering, 4 Paths; 850...2450 MHz; 50 Ohm, SMA (f) |
| DEV 13-0355 | Output Module, 4 Paths; 850...2450 MHz; 50 Ohm, SMA (f) |
| DEV 13-0253 | Optical Input Module, 4 Paths; LC/APC |

Order Example

16x20 Distributing Matrix 16²; 850...2450 MHz; 75 Ohm, F (f) with LNB Powering for all Input Channels

- 1* DEV 1985/16x16
- 4* Option 23B
- 1 * DEV 13-0349

Contact

DEV Systemtechnik GmbH
 Grüner Weg 4A
 61169 Friedberg
 GERMANY
 Phone: +49 6031 6975 100
 Fax: +49 6031 6975 114
 info@dev-systemtechnik.com
 www.dev-systemtechnik.com

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Technical specifications are subject to change