ROHDE&SCHWARZ
Make ideas real

R&S®ZN-Z86 SWITCH MATRIX
Essential for testing complex multiport devices or multiple devices under test

R&S®ZN-Z86 with R&S®ZN-Z86 B42/B34/B44

Compact and scalable

► 100 MHz to 26.5 GHz
► Basic version extends 2-port VNA to 6 ports
► Basic version with R&S®ZN-Z86 B24 option extends 4-port VNA to 12 ports
► Optional extension of up to 24 ports on a single unit to support additional paths
► Extendable to up to 48 ports[1] including full crossbar functionality
► Fully integrated with multiport solid-state relays
► Hardware trigger as standard
► Convenient R&S®ZN-Z8x Toolbox software as standard

[1] Requires 2 x R&S®ZN-Z86 switch matrices with full options.

The perfect choice for

| Electronic, RF and microwave component testing | Aerospace and defense testing |
| Automotive testing | Production |

Key specifications

Key specifications	
Frequency range	100 MHz to 26.5 GHz
RF connector type	2.92 mm, female
Number of test ports	6/12/18/24/48[1]
Switching configuration	Full crossbar measurement with Rohde & Schwarz VNAs
Supported Rohde & Schwarz VNAs	R&S®ZNA, R&S®ZNB, R&S®ZNBT
Remote control	LAN, USB, direct control, BNC trigger

[1] Requires 2 x R&S®ZN-Z86 switch matrices with full options.

Your benefit	Features
Simple to operate	► Unified operation between vector network analyzer (VNA) and switch matrix ► Automatic detection and test port assignment ► User-friendly selection of speed or precision for measurement optimization with the VNA; VNA firmware automatically selects best possible route based on user's selection ► Measurement results displayed immediately and can be read at a glance ► Remote control via LAN, USB or dedicated device control interface ► Works just as well with 48-port configuration
Enables advanced automation	► Minimizes delays, synchronizes devices in real time and increases measurement throughput by means of automation ► Up to 2048 trigger sequences can be defined and supported ► Trigger types include mouse control via the R&S®ZN-Z8x Toolbox software, SCPI commands and an external trigger signal (TTL) via BNC connector
Convenient R&S®ZN-Z8x Toolbox software for getting started, device monitoring and troubleshooting	► Convenient all-in-one switch matrix management ► Easy path switching via mouse click or via trigger ► Definition of trigger sequences ► Command and control interface using SCPI; includes switch matrix feedback logs ► Usable on any switch matrices within the same network: microcontroller and FPGA updates (USB only), remote control and monitoring of switch matrix status ► Operated on a desktop computer, laptop or tablet running a Windows operating system via LAN

For more information, scan the QR code or click here

R&S®ZN-Z8x switch matrix overview and supported Rohde & Schwarz vector network analyzers

	10 MHz	100 MHz	8.5 GHz	20 GHz	26.5 GHz	Port configuration options	Supported VNAs
R&S®ZN-Z84						6/12/18/24/48*	R&S®ZNA/ZNB/ZNBT/ZND
R&S®ZN-Z85						6/12	R&S®ZNA/ZNB/ZNBT
R&S®ZN-Z86						**6/12/18/24/48***	**R&S®ZNA/ZNB/ZNBT**
R&S®ZN-Z86X						12/24	R&S®ZNA/ZNB/ZNBT

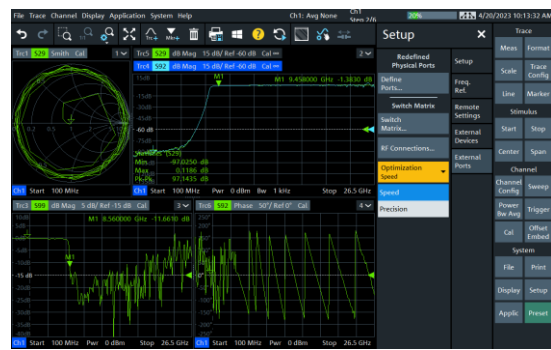## Hardware trigger as standard

Precise and reproducible switching in line with trigger signal via BNC from external trigger source (TTL, positive slope)

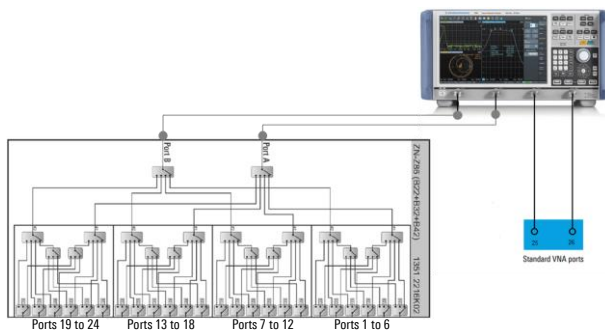## Extendable – up to 48 ports with full crossbar functionality

R&S®ZNB26 with two R&S®ZN Z86 switch matrices

Two boxes combine into one: unified operation with plug & play concept and automatic detection and configuration of test ports

"Speed" or "Precision" selected directly from the VNA user interface

Direct user interface on VNA for display and control makes it easy even for mixed mode operation

Popular accessories

Description	Item	Order No.
Base unit, 2 x 6, 100 MHz to 26.5 GHz	R&S®ZN-Z86	1351.2216.02
Additional test ports 7 to 12, 2 VNA ports to 12 test ports	R&S®ZN-Z86 B22	1351.2900.22
Additional test ports 7 to 12, 4 VNA ports to 12 test ports	R&S®ZN-Z86 B24	1351.2900.24
Additional test ports 13 to 18, 2 VNA ports to 18 test ports	R&S®ZN-Z86 B32	1351.2900.32
Additional test ports 13 to 18, 4 VNA ports to 18 test ports	R&S®ZN-Z86 B34	1351.2900.34
Additional test ports 19 to 24, 2 VNA ports to 24 test ports	R&S®ZN-Z86 B42	1351.2900.42
Additional test ports 19 to 24, 4 VNA ports to 24 test ports	R&S®ZN-Z86 B44	1351.2900.44

Popular accessories

Description	Item	Order No.
19" rack adapter for R&S®ZN-Z86	R&S®ZZA-KNP21	1177.8803.00
Base extension box, 2 HU for R&S®ZN-Z86, benchtop operation	R&S®ZN-ZTBE	1351.3906.02
Semi-rigid cable set: 2.92 mm (f) to 2.92 mm (m), for connecting the R&S®ZNA26/43 and R&S®ZN-Z86, benchtop operation	R&S®ZN-ZA26	1328.8905.02
Semi-rigid cable set: 2.92 mm (f) to 2.92 mm (m), for connecting the R&S®ZNB26/43 and R&S®ZN-Z86, benchtop operation	R&S®ZN-ZB26	1328.8911.02
Semi-rigid cable set 2.92 mm (f) to 2.92 mm (m). Connects two 2-to-24 port R&S®ZN-Z86 units to a 4-port R&S®ZNB26/43, benchtop operation	R&S®ZN-ZB26	1328.8911.05
Semi-rigid cable set: 2.92 mm (f) to 2.92 mm (m), for connecting the R&S®ZNBT26/40 and R&S®ZN-Z86, benchtop operation	R&S®ZN-ZT26	1328.8928.02
Direct control cable	R&S®ZN-B121	1323.9290.00
Torque wrench	R&S®ZN-ZTW	1328.8534.35
8 mm wrench extension for close connectors	R&S®SMA-WRENCH	1528.1590.02