

# R&S®OSP Open Switch and Control Platform

## Modular solution for RF switch and control tasks



# R&S®OSP

## Open Switch and Control Platform

### At a glance

The modular R&S®OSP open switch and control platform can be used to perform RF switch and control tasks.

A number of optional modules make the R&S®OSP ideal for a wide range of applications from simple RF switch functions to automatic path switchover in complex RF test systems such as EMC systems.

The R&S®OSP120 and R&S®OSP130 base units can be controlled via Ethernet. The R&S®OSP130 also has a display with a control panel. The individual switch and control modules of the R&S®OSP130 and of all connected R&S®OSP150 extension units can be manually operated using the control panel.

#### Benefits and key features

##### Modular, reliable, cost-efficient

The modularity provided by the R&S®OSP family helps ensure the fast setup of test and measurement configurations for applications in production, test labs and development departments. The ability to implement complex wiring by means of a single switch and control platform is an essential prerequisite for reliable and reproducible measurements that can be automated to enable cost-efficient test sequences.



#### Compact and flexible

The R&S®OSP units are accommodated in a compact 19" wide cabinet of two height units. The sophisticated CPU control functionality provides maximum flexibility for controlling switch and control modules and makes high-performance external interfaces available.

#### Powerful control and RF relay modules

The switch and control modules are inserted into the three rear module slots<sup>1)</sup>. The versatile 18 GHz or 40 GHz RF relay modules, 6 GHz semiconductor relay modules, digital input/output modules and modules with terminated relays can be combined as required, allowing users to configure the R&S®OSP cost-efficiently according to the application at hand.

Special modules make it easier to implement different switch, input and output functions such as control of external power relays.

#### Expandability

Up to four R&S®OSP150 extension units can be connected via the CAN bus port of the base units. This allows the range of functions of the base units to be considerably expanded while also making it possible to economically meet increasing requirements at a later point in time.

#### Easy control and system integration

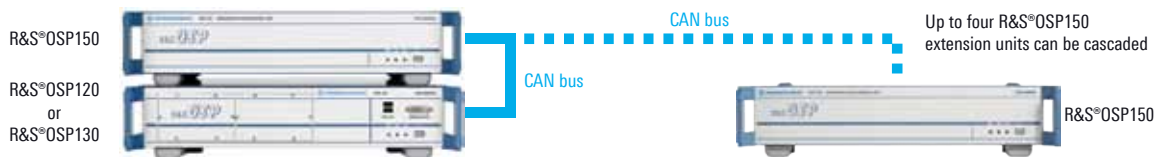
All base units can be controlled via the Ethernet interface. This interface makes it possible to connect the platform directly to a PC, integrate it into test systems or remotely operate it via a corporate network.

Compared to the R&S®OSP120, the R&S®OSP130 also has a control panel with a keyboard for manual operation of the R&S®OSP130 and any extension units that are connected. Manual operation of the R&S®OSP120 is possible by connecting an external keyboard and a monitor. The supplied operating software or a web GUI can be used to control the switch and control modules easily and directly without special software knowledge.

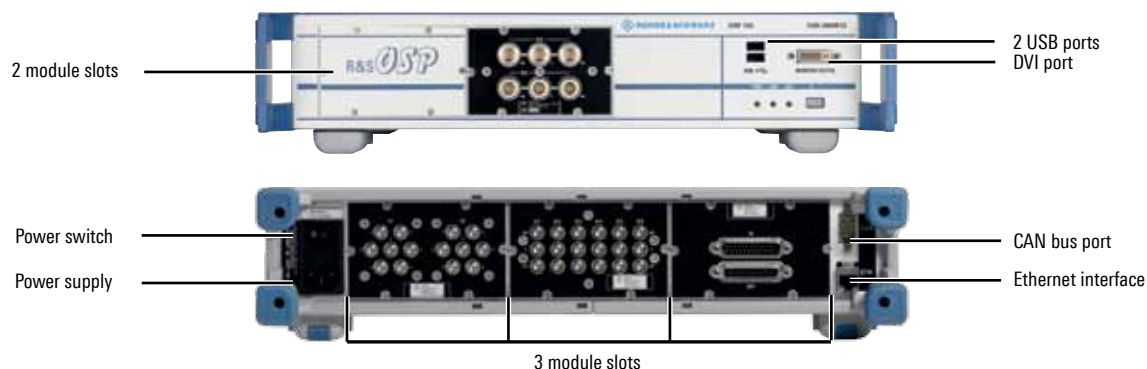
It is also possible to control the platform from application programs such as LabVIEW, LabWindows/CVI, Agilent VEE, C++, C#, Visual Basic, Visual Basic .NET.

<sup>1)</sup> As an alternative, it is also possible to insert one or two modules into the two front slots of the R&S®OSP120.

## Combinations of the R&S®OSP120 or R&S®OSP130 with the R&S®OSP150



## Front view of the R&S®OSP120 and rear view of the R&S®OSP



## Ordering information

Designation	Type	Order No.
<b>Base unit</b>		
Open Switch and Control Platform, with monitor interface	R&S®OSP120	1505.3009K02
Open Switch and Control Platform, with display and control panel	R&S®OSP130	1505.3009K03
Extension Unit	R&S®OSP150	1505.3009K05
<b>Options</b>		
RF Switch Module, 6 × coaxial changeover relays (SPDT), 0 Hz to 18 GHz	R&S®OSP-B101	1505.5101.02
RF Switch Module, 2 × coaxial multiposition relays (SP6T), 0 Hz to 18 GHz	R&S®OSP-B102	1505.5201.02
RF Switch Module, 6 × coaxial changeover relays (SPDT), 0 Hz to 40 GHz	R&S®OSP-B111	1505.4605.02
RF Switch Module, 2 × coaxial multiposition relays (SP6T), 0 Hz to 40 GHz	R&S®OSP-B112	1505.4611.02
RF Switch Module, 6 × SPDT (SMA), SSR, 9 kHz to 6 GHz	R&S®OSP-B107	1505.5901.02
RF Switch Module, 6 × SPDT (SMA), SSR, 9 kHz to 10 GHz, terminated	R&S®OSP-B127	1505.4728.02
RF Switch Module, 3 × SPDT (SMA), 0 Hz to 18 GHz, terminated	R&S®OSP-B121	1515.5504.02
RF Switch Module, 1 × SP6T (SMA), 0 Hz to 18 GHz, terminated	R&S®OSP-B122	1515.5510.02
RF Switch Module, 6 × SPDT (SMA) and 1 × SP6T, 0 Hz to 18 GHz, terminated	R&S®OSP-B123	1515.5527.02
RF Switch Module, 3 × SPDT (SMA) and 2 × SP6T, 0 Hz to 18 GHz, terminated	R&S®OSP-B124	1515.5533.02
RF Switch Module, 6 × SPDT (SMA) and 3 × SP6T, 0 Hz to 18 GHz, terminated	R&S®OSP-B125	1515.5540.02
RF Switch Module, 6 × SP6T (SMA), 0 Hz to 18 GHz, terminated	R&S®OSP-B126	1515.5556.02
RF Switch Module, 3 × SPDT (N), 0 Hz to 12 GHz, and 3 × SPDT (BNC), 0 Hz to 900 MHz	R&S®OSP-B106	1505.5601.02
RF Switch Module, 3 × SPDT (N), 0 Hz to 12.4 GHz	R&S®OSP-B131	1505.4740.02
RF Switch Module, 6 × SPDT (N), 0 Hz to 12.4 GHz	R&S®OSP-B132	1505.4757.02
Relay Driver Module, control of four external RF power relays, additional digital inputs/outputs, interlock	R&S®OSP-B104	1505.5401.02
EMC Module (DPDT, SPDT, interlock, digital I/O)	R&S®OSP-B114	1505.4711.02
Digital I/O Module, 16 × digital inputs, 16 × digital outputs	R&S®OSP-B103	1505.5301.02
Multiplexer Module, 6-channel, 4-wire multiplexer	R&S®OSP-B108	1505.5718.02
Accessories (see data sheet)		

For data sheet, see PD 5213.9928.22 and [www.rohde-schwarz.com](http://www.rohde-schwarz.com)

Your local Rohde&Schwarz expert will help you determine the optimum solution for your requirements.  
To find your nearest Rohde&Schwarz representative, visit [www.sales.rohde-schwarz.com](http://www.sales.rohde-schwarz.com)

## Service you can rely on

- | Worldwide
- | Local and personalized
- | Customized and flexible
- | Uncompromising quality
- | Long-term dependability

## About Rohde & Schwarz

Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established more than 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

## Environmental commitment

- | Energy-efficient products
- | Continuous improvement in environmental sustainability
- | ISO 14001-certified environmental management system

Certified Quality System  
**ISO 9001**

## Rohde & Schwarz GmbH & Co. KG

[www.rohde-schwarz.com](http://www.rohde-schwarz.com)

## Regional contact

- | Europe, Africa, Middle East | +49 89 4129 12345  
[customersupport@rohde-schwarz.com](mailto:customersupport@rohde-schwarz.com)
- | North America | 1 888 TEST RSA (1 888 837 87 72)  
[customer.support@rsa.rohde-schwarz.com](mailto:customer.support@rsa.rohde-schwarz.com)
- | Latin America | +1 410 910 79 88  
[customersupport.la@rohde-schwarz.com](mailto:customersupport.la@rohde-schwarz.com)
- | Asia/Pacific | +65 65 13 04 88  
[customersupport.asia@rohde-schwarz.com](mailto:customersupport.asia@rohde-schwarz.com)
- | China | +86 800 810 8228/+86 400 650 5896  
[customersupport.china@rohde-schwarz.com](mailto:customersupport.china@rohde-schwarz.com)

R&S® is a registered trademark of Rohde & Schwarz GmbH & Co. KG  
Trade names are trademarks of the owners | Printed in Germany (bb)  
PD 5214.1437.12 | Version 03.00 | February 2012 | R&S®OSP

Data without tolerance limits is not binding | Subject to change

© 2008 - 2012 Rohde & Schwarz GmbH & Co. KG | 81671 München, Germany



5214143712