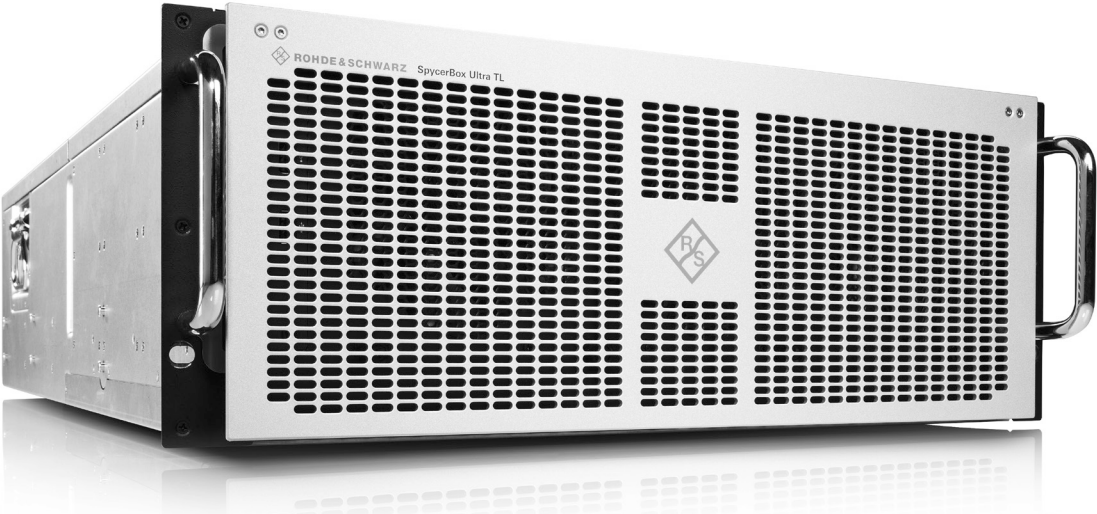


R&S® SpycerBox Ultra TL Specifications



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Definitions

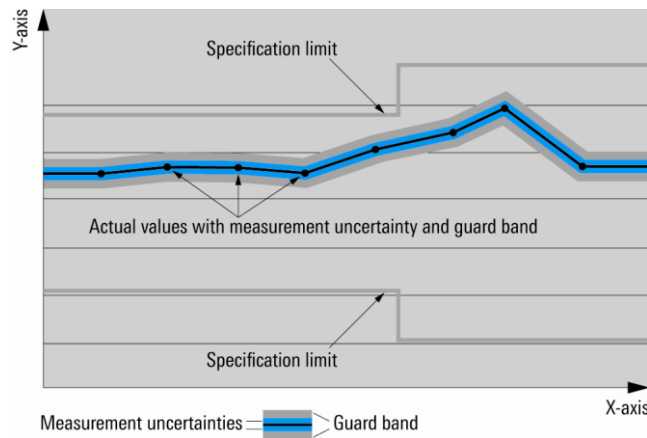
General

Product data applies under the following conditions:

- Three hours storage at ambient temperature followed by 30 minutes warm-up operation
- Specified environmental conditions met
- Recommended calibration interval adhered to
- All internal automatic adjustments performed, if applicable

Specifications with limits

Represent warranted product performance by means of a range of values for the specified parameter. These specifications are marked with limiting symbols such as $<$, \leq , $>$, \geq , \pm , or descriptions such as maximum, limit of, minimum. Compliance is ensured by testing or is derived from the design. Test limits are narrowed by guard bands to take into account measurement uncertainties, drift and aging, if applicable.



Specifications without limits

Represent warranted product performance for the specified parameter. These specifications are not specially marked and represent values with no or negligible deviations from the given value (e.g. dimensions or resolution of a setting parameter). Compliance is ensured by design.

Typical data (typ.)

Characterizes product performance by means of representative information for the given parameter. When marked with $<$, $>$ or as a range, it represents the performance met by approximately 80 % of the instruments at production time. Otherwise, it represents the mean value.

Nominal values (nom.)

Characterize product performance by means of a representative value for the given parameter (e.g. nominal impedance). In contrast to typical data, a statistical evaluation does not take place and the parameter is not tested during production.

Measured values (meas.)

Characterize expected product performance by means of measurement results gained from individual samples.

Uncertainties

Represent limits of measurement uncertainty for a given measurand. Uncertainty is defined with a coverage factor of 2 and has been calculated in line with the rules of the Guide to the Expression of Uncertainty in Measurement (GUM), taking into account environmental conditions, aging, wear and tear.

Device settings and GUI parameters are indicated as follows: "parameter: value".

Typical data as well as nominal and measured values are not warranted by Rohde & Schwarz.

At a glance

R&S®SpycerBox Ultra TL provides all the assets of a powerful and compact storage solution in a single unit. The 4 HU chassis offers reliable and easy-to-maintain nearline storage with maximum density.

Key facts

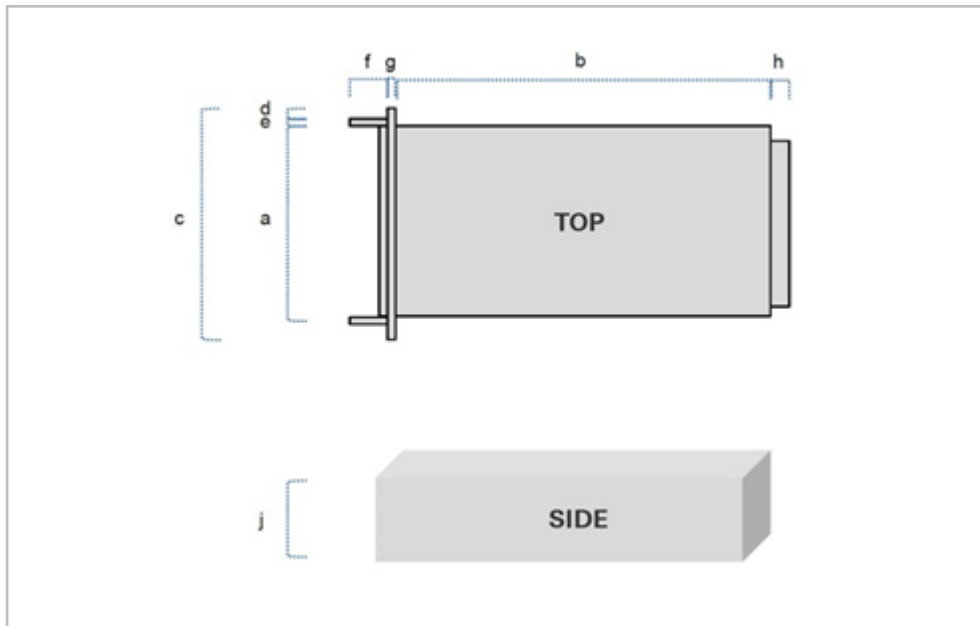
- High-performance nearline for mid-term archiving
- Supports compressed formats up to 4K
- High-density with 48 disks, SAN and NAS server in 4 HU chassis
- Low entry-level pricing
- Extensive monitoring of entire infrastructure
- Low carbon footprint

Specifications

System configuration	<ul style="list-style-type: none"> • 4 HU rack mount • 48 top-mounted hot-swappable media hard drives • 1+1 redundant back-mounted hot-swappable operating system hard drives • 1+1 redundant hot-swappable power supply • 2 × 1 Gigabit Ethernet ports • 2 USB 3.0 ports (front) • 2 USB 2.0 ports (rear) • 2 USB 3.0 ports (rear) • Cent OS 7.x operating system
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General data

Electrical data		
Input power requirements		100 V to 240 V AC at 47 Hz to 63 Hz
Power consumption	input power	max. 1184 W, typ. 911.4 W
	idle power	641 W
Power percentage		typ./max. 0.77
Max. amperage		4.97
cos φ		0.9811
Heat		3111 BTU/h
Number of PSUs		3
Product conformity		
FCC rating		class A
CE marking		in line with: <ul style="list-style-type: none"> • EMC directive 2004/108/EC • low-voltage directive 2006/95/EC
Korea certification		in line with KC (Korea certification)
Dimensions and weight		
Dimensions (W × H × D)	incl. handles	438 mm × 176 mm × 860 mm (17.2 in × 6.9 in × 33.9 in)
Weight	chassis weight	approx. 36.7 kg (80.9 lb)
	chassis weight with maximum HDD drive configuration	approx. 67.9 kg (149.7 lb)



The figure shows the dimensions of the R&S®SpycerBox Ultra TL.
 The drawing includes space for connectors and plugs that can protrude from the rear ("plug safety", usually plus 150 mm). However, the amount of space depends on the type of connectors used.
 a: 438 mm (17.2 in), b: 795 mm (31.3 in), c: 480 mm (18.9 in), d: 11 mm (0.4 in),
 e: 10 mm (0.4 in), f: 44 mm (1.7 in), g: 2 mm (0.1 in), h: 18 mm (0.7 in), j: 176 mm (6.9 in).

Ordering information

Designation	Type	Order No.
SpycerBox UltraTL SAN FC 192TB(SATA) w.o. FS	SBXTL	2902.1863.05
SpycerBox UltraTL SAN FC 288TB(SATA) w.o. FS	SBXTL	2902.1863.06
SpycerBox UltraTL SAN FC 384TB(SATA) w.o. FS	SBXTL	2902.1863.07
Base units (half populated)		
R&S®SpycerBox UltraTL SAN FC 96 Tbyte (SATA), without file system	R&S®SBXTL	2902.1863.04
R&S®SpycerBox UltraTL SAN FC 144 Tbyte (SATA), without file system	R&S®SBXTL	2902.1863.03
R&S®SpycerBox UltraTL SAN FC 192 Tbyte (24 x SATA), without file system	R&S®SBXTL	2902.1863.08
Storage options (for half stocked SpycerBox Ultra TL)		
R&S®SpycerBox Ultra TL 24 x 4 Tbyte Drives Bundle	R&S®SBXTL-B101	2900.8302.00
R&S®SpycerBox Ultra TL Bundle 24 x 6 Tbyte	R&S®SBXTL-B102	2900.8319.00
R&S®SpycerBox Ultra TL Bundle 24 x 8 Tbyte	R&S®SBXTL-B105	2902.0573.02
JBODs (second RAID controller is mandatory)		
R&S®SpycerBox JBOD TL 192 Tbyte (SATA)	R&S®SBXTL	2902.1870.03
R&S®SpycerBox JBOD TL 288 Tbyte (SATA)	R&S®SBXTL	2902.1870.04
R&S®SpycerBox TL JBOD 384 Tbyte (SATA)	R&S®SBXTL	2902.1870.05
Interface options		
R&S®SpycerBox Ultra TL Dual 10 Gigabit Ethernet SFP+	R&S®SBXZ8290	2900.8290.00
R&S®SpycerBox Ultra TL Quad 16 Gigabit Fiber Channel Upgrade	R&S®SBXTL-B321	2900.8477.00
R&S®SpycerBox Ultra TL Second RAID Controller	R&S®SBXTL-B210	2900.8283.00
GC CLP6-B11 FC/SAN DUAL 16 GBPS PCIE	CLP6-B11	2900.8148.00
R&S®SpycerBox Ultra TL Quad Port 1 GbE	R&S®VEN2U-B302	2900.1650.00
R&S®SpycerBox Ultra TL Single 40 GbE	R&S®SBXZ0609	2902.0609.03
SpycerBox Ultra TL dual 40 GbE	R&S®SBXZ0615	2902.0615.02
R&S®SpycerBox Ultra TL 10 GbE Dual Port, Cop RJ-45, PCIe	R&S®SBXTL-B303	2902.0667.02
Accessories		
R&S®SpycerBox SAN Accessory Kit	R&S®SBXZ2510	2900.2510.00
File system options		
SN5 Server License for Nearline < 500 TB	SBX	2902.1263.00
SN5 Server License for Nearline > 500 TB	SBX	2902.1270.00
GH SBX-K35 SFS Server LIC. 1 CPU	SBX-K35	2902.2153.02

Service levels agreements

Designation	Type	Order No.
SLA Warranty Upgrade to Advanced	R&S®SWASBXTL	2902.2382.38
SLA Warranty Upgrade to Premium	R&S®SWPSBXTL	2902.2382.39
SLA Basic 1 Year	R&S®SB1SBXTL	2902.2382.02
SLA Basic 2 Years	R&S®SB2SBXTL	2902.2382.03
SLA Basic 3 Years	R&S®SB3SBXTL	2902.2382.04
SLA Basic Upgrade to Advanced	R&S®SBASBXTL	2902.2382.46
SLA Advanced 1 Year	R&S®SA1SBXTL	2902.2382.08
SLA Advanced 2 Years	R&S®SA2SBXTL	2902.2382.09
SLA Advanced 3 Years	R&S®SA3SBXTL	2902.2382.10
SLA Advanced Upgrade to Premium	R&S®SAPSBXTL	2902.2382.47
SLA Premium 1 Year	R&S®SP1SBXTL	2902.2382.14
SLA Premium 2 Years	R&S®SP2SBXTL	2902.2382.15
SLA Premium 3 Years	R&S®SP3SBXTL	2902.2382.16

Professional support

Designation	Type	Order No.
Remote System Installation and Integration Support per Day Service technician for remote installation/integration (via Internet) of Rohde & Schwarz file-based media systems/solutions (on business day).	R&S®REMDAY	2902.2482.00
On-Site Installation per Day Service technician for on-site installation of Rohde & Schwarz file-based media systems/solutions (on business day). Travel costs are charged extra. Quantity of days charged will be based on real on-site expense (partial days charged as full days). Travel days are not charged.	R&S®ONSIDAY	2902.2524.00
On-Site Installation per WE Day Service technician for on-site installation of Rohde & Schwarz file-based media systems/solutions (on weekend day). Travel costs are charged extra. Quantity of days charged will be based on real on-site expense (partial days charged as full days). Travel days are not charged.	R&S®ONSIWEDAY	2902.2530.00
On-Site Training per Day On-site training for Rohde & Schwarz file-based media systems/solutions per day. Travel costs are charged extra. Quantity of days charged will be based on real on-site expense (partial days charged as full days). Travel days are not charged.	R&S®ONSTDAY	2902.2576.00
Travel costs for service technician	R&S®TRCOST	2901.1847.00

Service that adds value

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

Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, monitoring and network testing. Founded more than 80 years ago, the independent company which is headquartered in Munich, Germany, has an extensive sales and service network with locations in more than 70 countries.

Sustainable product design

- | Environmental compatibility and eco-footprint
- | Energy efficiency and low emissions
- | Longevity and optimized total cost of ownership

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R&S®SpycerBox Ultra TL

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