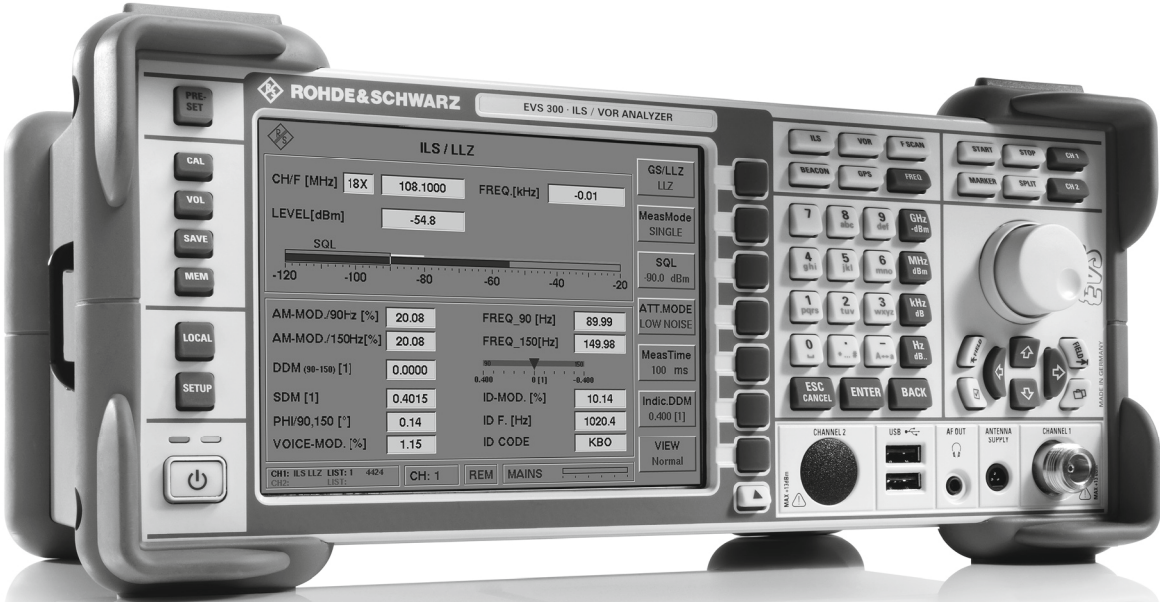


R&S® EVS300 ILS/VOR Analyzer Specifications



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Definitions

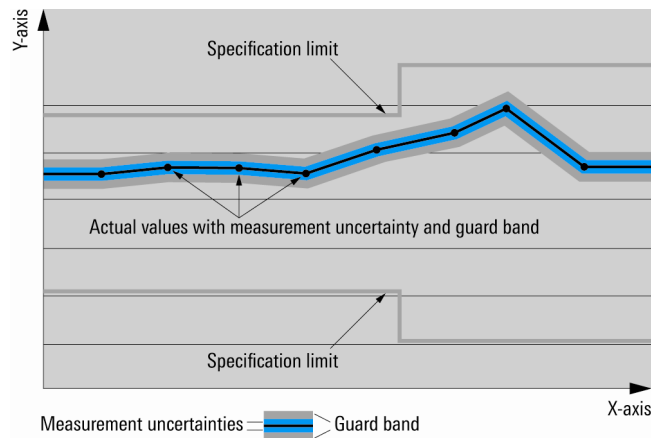
General

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.

Specifications

Frequency

| | | |
|----------------------------|--|----------------------|
| Frequency range | | 70 MHz to 350 MHz |
| Preselection filter ranges | marker beacon | 74.7 MHz to 75.3 MHz |
| | ILS LLZ | 108 MHz to 112 MHz |
| | ILS GS | 320 MHz to 340 MHz |
| | VOR, GBAS | 108 MHz to 118 MHz |
| Frequency resolution | | 100 Hz |
| Temperature drift | -10 °C to +55 °C | 1 ppm |
| Aging per year | after 30 days of uninterrupted operation | 1 ppm |

Level

| | | |
|-----------------------------------|--|---------------------|
| Absolute level | | |
| Maximum input power | | +13 dBm |
| Display ranges ¹ | low noise mode (preamplifier on) | -120 dBm to -20 dBm |
| | normal mode (preamplifier off) | -110 dBm to -10 dBm |
| | low distortion mode (RF attenuator on) | -100 dBm to +20 dBm |
| | autorange mode | -120 dBm to +20 dBm |
| Level resolution | | 0.1 dB |
| Accuracy | at -30 dBm | < 0.8 dB |
| Linearity error | in range from -70 dBm to 0 dBm | < 0.5 dB |
| Additional deviation | for two frequency ILS signals in wideband mode | < 0.9 dB |
| Inherent noise | low noise mode | < -115 dBm |
| Spurious response, inherent | without input signal, low noise mode | < -90 dBm |
| Intermodulation | | |
| Third-order intercept point (TOI) | 2 × 10 dBm, Δf > 200 kHz, low distortion | > 20 dBm |

ILS signal analysis

R&S®EVS300 measurement mode: single. At an input level > -70 dBm, specifications apply even with a measurement time of 10 ms.

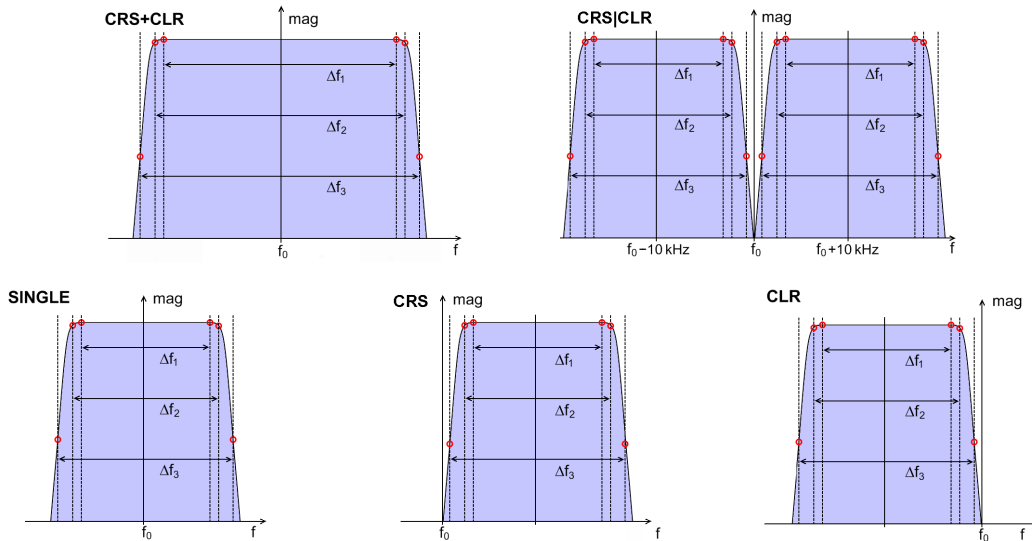
| | | |
|---|--------------------------------|---------------------------------|
| Input level range | | -80 dBm to +10 dBm |
| Modulation depth (0 % to 95 %) | | |
| Resolution | | 0.01 % |
| Accuracy | 90/150 Hz ± 2.5 % ² | ≤ 0.5 % |
| | voice/identifier | ≤ 1.0 % |
| AF | | |
| Accuracy | 90/150 Hz ± 5 Hz | ≤ 0.05 Hz |
| | 1020 Hz ± 50 Hz | ≤ 5.0 Hz |
| Phase angle 90/150 Hz | | |
| Measurement range | | 0° to +120° or -60° to +60° |
| Resolution | | 0.1° |
| Accuracy | | ≤ 0.2° |
| DDM measurement, localizer mode | | |
| Accuracy | ≤ ±10 % DDM | ≤ 0.04 % DDM ± 0.1 % of reading |
| | > ±10 % DDM | ≤ 0.04 % DDM ± 0.2 % of reading |
| DDM measurement, glideslope mode | | |
| Accuracy | ≤ ±20 % DDM | ≤ 0.08 % DDM ± 0.1 % of reading |
| | > ±20 % DDM | ≤ 0.08 % DDM ± 0.2 % of reading |

¹ Overload display if in-band or out-of-band signals are overloading.

² Max. frequency drift of modulation signal.

ILS demodulation filters (for DDM and SDM calculation)

| Measurement modes | | Single | CRS+CLR | CRS | CLR | CRS CLR |
|-------------------|-----------------------------------|----------|----------|----------|----------|----------|
| Δf_1 | filter flatness (ripple < 0.1 dB) | 12.4 kHz | 32.0 kHz | 12.4 kHz | 12.4 kHz | 12.4 kHz |
| Δf_2 | -3 dB bandwidth | 14.8 kHz | 34.9 kHz | 14.8 kHz | 14.8 kHz | 14.8 kHz |
| Δf_3 | -60 dB stopband attenuation | 18.8 kHz | 39.1 kHz | 18.8 kHz | 18.8 kHz | 18.8 kHz |



ILS demodulation filters (for DDM and SDM calculation). Filter for wideband mode identical to CRS+CLR mode.

Marker beacon signal analysis

| | | |
|---|--|----------------------|
| Input level range | | -80 dBm to +10 dBm |
| Modulation depth (80 % to 100 %) | | |
| Resolution | | 0.01 % |
| Accuracy | 400/1300/3000 Hz $\pm 2\%$ ³ | $\leq 0.5\%$ |
| | ID tone 1020 Hz $\pm 2\%$ ³ | $\leq 1.0\%$ |
| AF | | |
| Accuracy | 400/1300/3000 Hz $\pm 50\text{ Hz}$ ³ | $\leq 0.5\text{ Hz}$ |
| | ID tone 1020 Hz $\pm 50\text{ Hz}$ ³ | $\leq 5.0\text{ Hz}$ |

VOR signal analysis

| | | |
|--|--|---|
| Input level range | | -90 dBm to +10 dBm ⁴ |
| Azimuth | | |
| Resolution | | 0.01° |
| Accuracy | | $\leq \pm 0.1^\circ$ ⁵ |
| AM modulation depth (0 % to 50 %) | | |
| Resolution | | 0.01 % |
| Accuracy | 30/9960 Hz $\pm 2\%$ ³ | $\leq 0.5\%$ |
| | voice/identifier | $\leq 1.0\%$ |
| | AM distortion | $\leq 1.0\%$ |
| AF frequency | | |
| Accuracy | 30 Hz $\pm 3\text{ Hz}$ ³ | $\leq 0.03\text{ Hz}$ |
| | 1020 Hz $\pm 50\text{ Hz}$ ³ | $\leq 5.0\text{ Hz}$ |
| | 9960 Hz $\pm 100\text{ Hz}$ ³ | $\leq 0.5\text{ Hz}$ |
| FM accuracy | | |
| Resolution | | 0.1 Hz |
| Accuracy | | $\leq 0.1\text{ Hz} \pm 0.5\%$ of reading |

³ Max. frequency drift of modulation signal.

⁴ Measurement time for input range -90 dBm to -80 dBm: 500 ms.

⁵ Azimuth accuracy for input level -90 dBm to -80 dBm: $< \pm 0.3^\circ$.

Frequency scan (R&S® EVS-K1 option)

| | | |
|---------------------------|------------|---|
| Frequency range | | 70 MHz to 350 MHz |
| Start/stop or center/span | | user-selectable in range from 70 MHz to 350 MHz |
| Level measurement range | selectable | -120 dBm to +13 dBm |
| Resolution bandwidths | | 1/3/10/30 kHz |
| Trace functions | | clear/write, average, peak hold, view |

FFT mode (R&S® EVS-K4 option)

| | | |
|------------------------|----------|---------------------------------------|
| Frequency range | | 20/10/5/2.5/1.25/0.625 kHz |
| Window functions | | none/Hann/flat top |
| Window flatness | none | +0/-4 dB |
| | Hann | +0/-1.5 dB |
| | flat top | +0/-0.1 dB |
| -3 dB bandwidth | none | 0.2 % of span |
| | Hann | 0.31 % of span |
| | flat top | 0.8 % of span |
| Trace functions | | clear/write, average, peak hold, view |

Support for Rohde & Schwarz power sensors (R&S® EVS-K5 option)

| | | |
|--------------------------|---------------------------|---|
| Supported sensors | USB connector | R&S®NRP-Z81, R&S®NRP-Z51, R&S®NRP-Z21 |
| | RS-232 connector | R&S®NRT-Z14, R&S®NRT-Z44 |
| Displayed values | R&S®NRP-Zxx | average power |
| | | peak power (with R&S®NRP-Z81 only) |
| | R&S®NRT-Zxx | power forward (average or PEP) power reverse (average or PEP) return loss, VSWR |
| Input range | depending on power sensor | see data sheet of respective power sensor |
| Units | power | W/dBm/dB (to reference level) |
| | return loss (R&S®NRT-Zxx) | dB |
| Resolution | power (R&S®NRP-Zxx) | 0.01 mW/dBm/dB |
| | power (R&S®NRT-Zxx) | 0.01 W/dBm/dB |
| | VSWR (R&S®NRT-Zxx) | 0.01 |
| | return loss (R&S®NRT-Zxx) | 0.01 dB |
| Accuracy | depending on power sensor | see data sheet of respective power sensor |
| Measurement time | R&S®NRP-Zxx | 10 ms to 2000 ms |
| | R&S®NRT-Zxx | 50 ms to 2000 ms |

DME pulse shape view (R&S® EVS-K6 option)

| | | |
|--------------------------|----------------------------|---|
| Supported sensor | R&S®EVS-K5 required | R&S®NRP-Z81 |
| Input range | | 1 nW to 100 mW (-60 dBm to +20 dBm) |
| Units | | dBm/W/V |
| Data acquisition | sample rate | 2.5/10/40/80 MHz |
| | buffer size | 0.5/1/2/4/8 ksample |
| Trigger settings | trigger mode | normal/single shot |
| | trigger source | continuous/level/extern (R&S®NRP-Z3 required for external triggering) |
| | trigger level | variable within input range |
| | trigger slope | positive/negative |
| | trigger delay | -50.00 µs to 9999.00 µs |
| Averaging | | 1/4/16/64/256/1024 |
| Pulse analysis functions | for unit V only | rise time, fall time, pulse width, pulse spacing |
| Resolution | time values pulse analysis | 0.01 µs |
| Accuracy | depending on power sensor | see data sheet of respective power sensor |

Oscilloscope mode (R&S® EVS-K7 option)

| | | |
|--------------------|----------------------------|------------------------------------|
| Input range | baseband range 5 V | 0.8/1.6/4/8/16 V |
| | baseband range 500 mV | 80/160/400/800/1600 mV |
| | RF input, modulation depth | 8/16/40/80/200 % |
| Resolution | 8 div | 40 pixel/div |
| Accuracy | baseband range 5 V | ≤ (50 mV + 1 pixel) |
| | baseband range 500 mV | ≤ (5 mV + 1 pixel) |
| | RF input | ≤ (1.0 % + 2 % of value + 1 pixel) |
| Time range | | 10/20/40/80/160/320 ms |
| Resolution | 10 div | 45 pixel/div |
| Accuracy | time measurements | ≤ 2 pixel |

GBAS mode (R&S® EVS-K9 option)

| | | |
|---------------------------------------|--------------------------------|--|
| Input level⁶ | | |
| Range | | -90 dBm to +10 dBm |
| Resolution | | 0.1 dB |
| Accuracy | at -30 dBm | < 1.0 dB |
| Linearity error | in range from -70 dBm to 0 dBm | < 0.8 dB |
| Inherent noise | low noise mode | < -115 dBm |
| Slots | | A to H |
| Simultaneously measured values | in every slot | <ul style="list-style-type: none"> station ID transmission length message block ID TRAIN FEC, APPLIC FEC message type (of all possible eight messages in slot view) |
| Supported message types | | <ul style="list-style-type: none"> message type 1 GPS correction data message type 4 final approach segment data block (FAS DB) |

SCAT I mode (R&S® EVS-K10 option)

| | | |
|---------------------------------------|--------------------------------|--|
| Input level⁶ | | |
| Range | | -90 dBm to +10 dBm |
| Resolution | | 0.1 dB |
| Accuracy | at -30 dBm | < 1.0 dB |
| Linearity error | in range from -70 dBm to 0 dBm | < 0.8 dB |
| Inherent noise | low noise mode | < -115 dBm |
| Slots | | A to H |
| Simultaneously measured values | in every slot | <ul style="list-style-type: none"> station ID transmission length message block ID TRAIN FEC, APPLIC FEC message type (of all possible eight messages in slot view) |
| Supported message types | | <ul style="list-style-type: none"> message type 1 GPS correction data message type 4 final approach segment data block (FAS DB) |

⁶ GBAS/SCAT burst in time slots A to H.

Data logger

| Simultaneously recorded parameters per record set (selectable) | ILS | Measurement modes | | | | | |
|--|-----|------------------------|---------|-----|-----|-----------|---|
| | | Single | CRS+CLR | CRS | CLR | CRS CLR | |
| | | STIOCP | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | Index | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | Date | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | Time | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | CRS/SINGLE [kHz] | ✓ | ✓ | ✓ | | ✓ |
| | | CLR [kHz] | | ✓ | | ✓ | ✓ |
| | | LEVEL [dBm; dBμV] | ✓ | ✓ | | | ✓ |
| | | AM-MOD./90 Hz [%] | ✓ | ✓ | | | |
| | | AM-MOD./150 Hz [%] | ✓ | ✓ | | | |
| | | DDM [μA; %, 1] | ✓ | ✓ | | | ✓ |
| | | SDM [μA; %, 1] | ✓ | ✓ | | | ✓ |
| | | FREQ_90 [Hz] | *1 | *1 | *1 | *1 | |
| | | FREQ_150 [Hz] | *1 | *1 | *1 | *1 | |
| | | PHI-90/150 [°] | *1 | *1 | *1 | *1 | |
| | | Voice-Mod. [%] | *1 | *1 | *1 | *1 | |
| | | ID-Mod. [%] | *1 | *1 | *1 | *1 | |
| | | ID-F. [Hz] | *1 | *1 | *1 | *1 | |
| | | ID-Code | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | LEV_CLR [dBm; dBμV] | | ✓ | | ✓ | ✓ |
| | | LEV_CRIS [dBm; dBμV] | | ✓ | ✓ | | ✓ |
| | | AM-MOD_CLR/90 Hz [%] | | | | ✓ | ✓ |
| | | AM-MOD_CLR/150 Hz [%] | | | | ✓ | ✓ |
| | | DDM_CLR [μA; %, 1] | | | | ✓ | ✓ |
| | | SDM_CLR [μA; %, 1] | | | | ✓ | ✓ |
| | | AM-MOD_CRIS/90 Hz [%] | | | ✓ | | ✓ |
| | | AM-MOD_CRIS/150 Hz [%] | | | ✓ | | ✓ |
| | | DDM_CRIS [μA; %, 1] | | | ✓ | | ✓ |
| | | SDM_CRIS [μA; %, 1] | | | ✓ | | ✓ |
| | | PHI-90/90 [°] | | | | | ✓ |
| | | PHI-150/150 [°] | | | | | ✓ |
| | | K2/90 Hz [%] | *2 | *2 | *2 | *2 | |
| | | K2/150 Hz [%] | *2 | *2 | *2 | *2 | |
| | | K3/90 Hz [%] | *2 | *2 | *2 | *2 | |
| | | K3/150 Hz [%] | *2 | *2 | *2 | *2 | |
| | | THD/90 Hz [%] | *2 | *2 | *2 | *2 | |
| | | THD/150 Hz [%] | *2 | *2 | *2 | *2 | |
| | | MeasTime [ms] | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | MeasMode | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | LLZ_GS | ✓ | ✓ | ✓ | ✓ | ✓ |
| | VOR | STIOCP | | | | | |
| | | Index | | | | | |
| | | Date | | | | | |
| | | Time | | | | | |
| | | FREQ [MHz] | | | | | |
| | | MEAS.FREQ [MHz] | | | | | |
| | | LEVEL [dBm] | | | | | |
| | | AM-MOD./30 Hz [%] | | | | | |
| | | AM-MOD./9960 Hz [%] | | | | | |
| | | AM-DIST./9960 Hz [%] | | | | | |
| | | FREQ_30 [Hz] | | | | | |
| | | FREQ_9960 [Hz] | | | | | |
| | | FREQ_FM30 [Hz] | | | | | |
| | | BEARING (from) [°] | | | | | |
| | | FM-DEV. [Hz] | | | | | |
| | | FM-INDEX | | | | | |
| | | Voice-Mod. [%] | | | | | |
| | | ID-Mod. [%] | | | | | |
| | | ID-F. [Hz] | | | | | |
| | | ID-Code | | | | | |

| | | |
|---------------|--|--|
| marker beacon | STIOCP Index Date Time FREQ [MHz] MEAS.FREQ [MHz] LEVEL [dBm] AM-MOD./3000 Hz [%] AM-MOD./1300 Hz [%] AM-MOD./4000 Hz [%] FREQ_3000 [Hz] FREQ_1300 [Hz] FREQ_400 [Hz] ID-Mod. [%] ID-F. [Hz] ID-CODE | |
| GBAS | Channel STIOCP Index Date Time Temp [°C] SLOT FREQ [MHz] F_DEV [kHz] LEVEL [dBm] SID Len [bit] Train.FEC Applic.FEC MBI MT 1 (present) MT 4 (present) GPS_Dist [m] GPS_Angle [°] ATT.MODE MT1 GBAS: MB CRC MB ID St.ID MsgLen [byte] Z-Cnt [m:s] Add.Msg.Flag NrOfMeasn MeasnType EphDecorPar [m/m] EphemCrcMSB EphemCrcLSB SrcAvailDur [sec] — 32* for all satellites — SatID IOD PRC [m] RRCor [m/s] S_pr_gnd [m] DiffnprcB1 [m] DiffnprcB2 [m] DiffnprcB3 [m] DiffnprcB4 [m] — 32* for all satellites — MT4 GBAS: MB CRC MB ID St.ID | |

| | | |
|--------|---|--|
| | <p>MsgLen [byte] DataSetLen</p> <p>– max 256* (per FASDB) –</p> <p>OpType SbasServProv AirportID RunwayNo RunwayLtr ApproachPerfDesig RouteInd RPDS RefPathID LTP_FTP_Lat [°] LTP_FTP_Long [°] LTP_FTP_Height [m] DeltaFPAP_Lat [°] DeltaFPAP_Long [°] TCH UnitTCH GPA [°] CourseWidth [m] DeltaLenOffset [m] VertAlertLim [m] LatrAlertLim [m] FASCRC DataSetLen</p> <p>– max 256* (per FASDB) –</p> | |
| SCAT I | <p>Channel STIOCP Index Date Time Temp [°C] SLOT FREQ [MHz] F_DEV [kHz] LEVEL [dBm] SID Len [bit] Train.FEC Applic.FEC MBI MT 1 (present) MT 4 (present) GPS_Dist [m] GPS_Angle [°] ATT.MODE MT1 SCAT: MB CRC MB ID St.ID MsgLen [byte] Z-Cnt [m:s] Acc.Err.Bnd. [m/s*s] K_md_gnd</p> <p>— 32* for all satellites —</p> <p>SatID PRC [m] IOD RRCor [m/s] S_pr_gnd [m] B_pr_gnd [m] S_fail_gnd [m]</p> | |

| | | |
|---|--|--|
| | <p>B_fail_gnd [m]</p> <p>— 32* for all satellites —</p> <p>MT4 DATA: MB CRC MB ID St.ID MsgLen [byte]</p> <p>– max 256* (per FASDB) –</p> <p>OpType AirportID RunwayNo RunwayLtr RouteInd ValInd RPDS RefPathID ThDP_Lat [°] ThDP_Long [°] ThDP_Height [m] DERP_Lat [°] DERP_Long [°] TCH [ft] GPA [°] FASCRC</p> <p>– max 256* (per FASDB) –</p> | |
| Additionally recorded parameters in all modes | GPS_lat. GPS_long. GPS_alt [m] GPS_speed [km/h] GPS_date GPS_time GPS_Sat GPS_Status GPS_Fix GPS_HDOP GPS_VDOPTemp [°C] MeasTime [ms] ATT.Mode TrigCounter | |

| | | |
|--|---------------------------------------|--|
| Data rate | | up to 100 record sets/s |
| Number of record sets per data list | | 1 000 000 |
| Number of data lists per mode | ILS, VOR, marker beacon, GBAS, SCAT I | 999 |
| Graphical representation of data logger content | ILS mode | up to 3 traces |
| Selectable parameters for graphical representation | ILS mode | DDM [μ A] |
| | | DDM_CRIS [μ A] |
| | | DDM_CLR [μ A] |
| | | SDM [1] |
| | | SDM_CRIS [1] |
| | | SDM_CLR [1] |
| | | LEVEL [dBm] |
| Display functions | ILS mode | marker, marker to peak |
| | | vertical scaling |
| | | horizontal scaling |
| Graphical representation of data logger content | GBAS/SCAT I mode | LEVEL [dBm], 32*PRC [m], distance from reference [m] |

Inputs and outputs (front)

| | | |
|----------------|------------------------------|---|
| RF input | channel 1 | N connector, 50 Ω |
| | channel 2, R&S®EVS-B1 option | N connector, 50 Ω |
| AF output | | 3.5 mm female connector |
| Antenna supply | | output for feeding active antennas |
| USB | double connector | USB stick for data storage and software updates |

Inputs and outputs (rear)

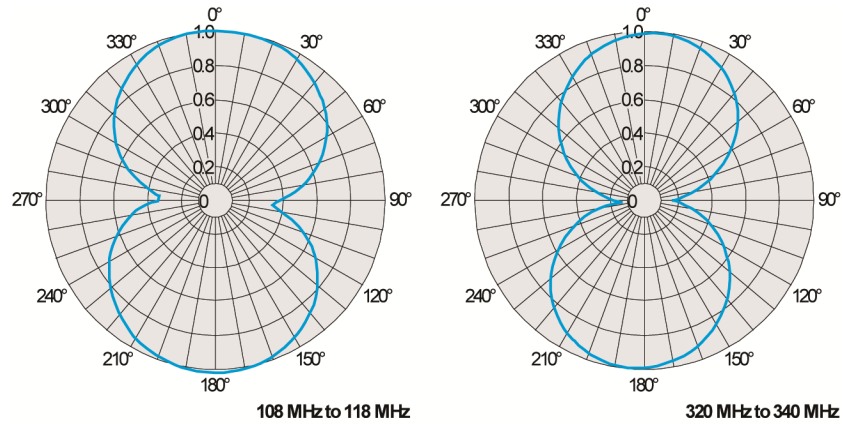
| | | |
|------------------------|--|-------------------------------|
| Remote interface | | RS-232, 9-pin D-Sub connector |
| GPS interface | R&S®EVS-K2 options | RS-232, 9-pin D-Sub connector |
| LAN interface | | RJ-45, 100BASE-T |
| DC output | | 12 V, max. 300 mA |
| DC input | | 10 V to 28 V |
| Baseband/trigger input | | BNC connector |
| | impedance | 1 M Ω , nominal |
| | baseband level for 100 % modulation depth (selectable) | 500 mV/5 V |
| | trigger level | 3.3 V to 12 V, nominal |
| Analog output | two outputs | BNC connector |
| | impedance | 50 Ω , nominal |

General data

| | | |
|------------------------------|---|--|
| Display | | 16.4 cm/6.4" TFT color display |
| Resolution | | 640 × 480 pixel |
| Temperature range | operating temperature range | -10 °C to +55 °C |
| | storage temperature range | -35 °C to +70 °C |
| Power supply | | |
| AC supply | | 100 V to 240 V AC, 1 A to 0.6 A, 47 Hz to 63 Hz |
| Safety | | in line with EN 61010-1 |
| Internal battery | R&S®EVS-B3 option | NiMH battery |
| Battery operating time | between +10 °C and +45 °C | 8 h to 10 h |
| Recharging time | | 4 h |
| External DC power supply | | 10 V to 28 V, max. 3 A |
| Mechanical resistance | | |
| Vibration | sinusoidal | in line with IEC 68-2-6 |
| | random | 10 Hz to 100 Hz, acceleration 1 g (RMS) |
| Shock | | 40 g shock spectrum, in line with MIL-STD-810D and MIL-T-28800D |
| Material | | |
| R&S®EVS-Z1 | | polyamide (nylon) |
| R&S®EVS-Z2 | | alloy |
| Dimensions | | |
| R&S®EVS300 | W × H × D | 342 mm × 157 mm × 219 mm (13.46 in × 6.18 in × 8.62 in) |
| R&S®EVS-Z1 | W × H × D | 400 mm × 250 mm × 250 mm (15.75 in × 9.84 in × 9.84 in) |
| R&S®EVS-Z2 | W × H × D | 500 mm × 400 mm × 200 mm (19.69 in × 15.75 in × 7.87 in) |
| R&S®EVS-Z3 | L × H | 3.05 m × 1.05 m (120.08 in × 41.34 in) (stand dimensions, extended/retracted) |
| R&S®EVS-Z4 | W × H × D | 1200 mm × 300 mm × 80 mm (47.24 in × 11.81 in × 3.15 in) |
| R&S®EVS-Z5 | W × H × D | 108 mm × 35 mm × 115 mm (4.25 in × 1.38 in × 4.53 in) |
| R&S®EVS-Z6 | W × H × D | 345 mm × 160 mm × 51 mm (13.58 in × 6.30 in × 2.01 in) |
| R&S®EVS-Z7 | W × H × D (mounted on R&S®EVS300) | 480 mm × 133 mm × 298 mm (18.90 in × 5.24 in × 11.73 in) |
| R&S®EVS-Z21 | W × H × D | 108 mm × 35 mm × 122 mm (4.25 in × 1.38 in × 4.80 in) |
| Weight | | |
| R&S®EVS300 | with internal battery (R&S®EVS-B3 option) | 5.7 kg (12.57 lb) |
| R&S®EVS-Z1 | | 1.0 kg (2.20 lb) |
| R&S®EVS-Z2 | | 4.4 kg (9.70 lb) |
| R&S®EVS-Z3 | | 2.5 kg (5.51 lb) |
| R&S®EVS-Z4 | | 2.5 kg (5.51 lb) |
| R&S®EVS-Z5 | | 0.5 kg (1.10 lb) |
| R&S®EVS-Z6 | | 0.24 kg (0.53 lb) |
| R&S®EVS-Z7 | | 1.2 kg (2.69 lb) |
| R&S®EVS-Z21 | | 0.34 kg (0.75 lb) |

ILS (LLZ/GS)/VOR dipole antenna (R&S®EVS-Z3 option)

| | | |
|-------------------|--|---|
| Frequency range | | 108 MHz to 118 MHz 320 MHz to 340 MHz |
| Typical impedance | | 50 Ω |
| Typical gain | | -6 dBi |
| Polarization | | horizontal |
| Radiation pattern | | see typical directional receiving pattern |
| Connector | | BNC female |



Typical directional receiving pattern of the R&S®EVS-Z3.

Ordering information

| Designation | Type | Order No. |
|--|-------------|--------------|
| ILS/VOR Analyzer | R&S®EVS300 | 3544.4005.02 |
| Options | | |
| Second Signal Processing Unit | R&S®EVS-B1 | 5200.6625.02 |
| Battery Pack | R&S®EVS-B3 | 5200.8240.02 |
| Frequency Scan | R&S®EVS-K1 | 5200.6554.00 |
| GPS Mode | R&S®EVS-K2 | 5200.6548.00 |
| CRS/CLS Mode | R&S®EVS-K3 | 5200.9082.00 |
| FFT Mode | R&S®EVS-K4 | 5201.5922.00 |
| Support for Rohde & Schwarz power sensors | R&S®EVS-K5 | 5201.8644.02 |
| DME Pulse Shape View | R&S®EVS-K6 | 5201.8650.02 |
| Oscilloscope Mode | R&S®EVS-K7 | 5201.8667.02 |
| R&S®EVS-K5 plus R&S®EVS-K6 Package | R&S®EVS-K8 | 5201.8696.02 |
| GBAS Mode | R&S®EVS-K9 | 5202.8154.02 |
| SCAT Mode | R&S®EVS-K10 | 5201.7783.00 |
| Recommended extras | | |
| Weather Protection Bag | R&S®EVS-Z1 | 5200.5812.00 |
| Rugged Transport Case | R&S®EVS-Z2 | 5200.6525.00 |
| ILS (LLZ/GS)/VOR Dipole Antenna | R&S®EVS-Z3 | 5200.6577.02 |
| Carrying Bag for ILS (LLZ/GS)/VOR Dipole Antenna | R&S®EVS-Z4 | 5200.9999.00 |
| DC/DC Converter (10 V to 34 V, 3 A at 24 V) | R&S®EVS-Z5 | 5200.6619.02 |
| Protective Hard Cover | R&S®EVS-Z6 | 5201.7760.00 |
| 19" Adapter | R&S®EVS-Z7 | 5201.8680.00 |
| Verification Test Software | R&S®EVS-Z11 | 1329.8144.00 |
| DC Buffer | R&S®EVS-Z21 | 5201.9470.02 |
| Service manual, English | | 3544.4486.22 |
| Service manual, German | | 3544.4486.21 |
| Documentation of Calibration Values | R&S®DCV-2 | 5201.4349.02 |
| Accessories supplied | | |
| External power supply (100 V to 240 V) | | 5200.9118.02 |
| User manual, English | | 3544.4486.12 |
| User manual, German | | 3544.4486.11 |

| Service options | | |
|--|---------|---|
| Extended Warranty, one year | R&S®WE1 | Please contact your local Rohde & Schwarz sales office. |
| Extended Warranty, two years | R&S®WE2 | |
| Extended Warranty, three years | R&S®WE3 | |
| Extended Warranty, four years | R&S®WE4 | |
| Extended Warranty with Calibration Coverage, one year | R&S®CW1 | |
| Extended Warranty with Calibration Coverage, two years | R&S®CW2 | |
| Extended Warranty with Calibration Coverage, three years | R&S®CW3 | |
| Extended Warranty with Calibration Coverage, four years | R&S®CW4 | |

Extended warranty with a term of one to four years (WE1 to WE4)

Repairs carried out during the contract term are free of charge ⁷. Necessary calibration and adjustments carried out during repairs are also covered. Simply contact the forwarding agent we name; your product will be picked up free of charge and returned to you in top condition a couple of days later.

Extended warranty with calibration (CW1 to CW4)

Enhance your extended warranty by adding calibration coverage at a package price. This package ensures that your Rohde & Schwarz product is regularly calibrated, inspected and maintained during the term of the contract. It includes all repairs ⁷ and calibration at the recommended intervals as well as any calibration carried out during repairs or option upgrades.

For product brochure, see PD 5213.6070.12 and www.rohde-schwarz.com

⁷ Excluding defects caused by incorrect operation or handling and force majeure. Wear-and-tear parts are not included.

Service that adds value

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

About Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, radiomonitoring and radiolocation. Founded more than 80 years ago, this independent company has an extensive sales and service network and is present in more than 70 countries. The electronics group is among the world market leaders in its established business fields. The company is headquartered in Munich, Germany. It also has regional headquarters in Singapore and Columbia, Maryland, USA, to manage its operations in these regions.

Sustainable product design

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

Certified Quality Management
ISO 9001

Certified Environmental Management
ISO 14001

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PD 5213.6070.22 | Version 06.01 | December 2015 (ch)

R&S®EVS300 ILS/VOR Analyzer

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