

VOR/ILS Receiver/Analyzer EVS200

Specifications

Receiver section

Frequency range	74.7 MHz to 75.3 MHz, 107 MHz to 119 MHz, 319 MHz to 341 MHz
Accuracy	≤2 ppm
Resolution	5 kHz
Input voltage	15 dBm max. into 50 Ω
VSWR	<1.5
RF input	BNC (optional N)
Sensitivity	-96 dBm ≥18 dB (IF bandwidth 8 kHz)

IF bandwidth

Standard	min. ±15 kHz (-3 dB), max. ±40 kHz (-60 dB) min. ±4 kHz (-3 dB), max. ±12 kHz (-60 dB)
----------	---

optionally:

	min. ±19 kHz (-6 dB), max. ±38 kHz (-60 dB)
	min. ±8 kHz (-6 dB), max. ±20 kHz (-60 dB)

Demodulation

AM

Absolute level

Display range	-96 dBm to +10 dBm
Accuracy	±2 dB

Difference level

Bargraph (quasi-analog)	±12 dB (rel. to reference level)
Resolution	0.1 dB
Accuracy	±1 dB

ILS signal analysis

RF level	-70 dBm to -30 dBm
Frequency range	108 MHz to 118 MHz 328 MHz to 336 MHz

Modulation depth (10% to 80%)

90 Hz / 150 Hz ±2%	accuracy 0.5%
300 Hz to 4 kHz (identifiable)	≤1.2% of reading

Phase angle 90 Hz / 150 Hz

Measurement range	±60°
Measurement accuracy	≤0.2°
Resolution	0.1°

DDM measurement (≥30 kHz IF bandwidth)

Localizer mode, measurement accuracy at	
15% to 25% modulation	≤±0.0004 DDM, ±0.1% of reading
10% to 30% modulation	≥±0.0004 DDM, ±0.2% of reading

Glideslope mode (≥30 kHz IF bandwidth)

Measurement accuracy at	
30% to 50% modulation	≤±0.0008 DDM, ±0.1% of reading
Resolution (LOC/GS)	0.0001 DDM
Analog DDM output	
Localizer	0 to 1 V in 4 subranges
Glideslope	0 to 1 V in 4 subranges
SDM measurement	
SDM 10% to 80%	accuracy ±1% absolute
Resolution	0.0001 SDM

VOR signal analysis

Azimuth

Accuracy	±0.1°
Resolution	0.05° / 0.01° (setup)

AM modulation depth 30 Hz and 9.96 kHz

Accuracy	≤1%
Resolution	0.1%

FM deviation

Accuracy	0.5%, ±0.1 Hz
Resolution	0.1 Hz

General data

RS-232 interface	8N1
Selectable baud rate	1200, 2400, 4800, 9600, 19200
Operating temperature range	-5°C to +45°C
Storage temperature range	-20°C to +60°C
Power supply	
AC	87 to 265 V, 47 to 63 Hz (440 Hz optional), built-in battery charger
External DC	9 to 15 V DC (typ. 12 V DC, 1.4 A)
Battery (optional)	12V / 3.2 Ah
Charging	during AC-supply operation
Operating time	>100 min with average brightness of display
Mechanical resistance	shock-tested to MIL-810D
Vibration test	to DIN-IEC 68-2-36 and 68-2-6
EMC	
RF leakage	to EN 50081-1
RF pickup	to EN 50082-1
Dimensions (W x H x D)	219 mm x 147 mm x 350 mm
Weight	4.9 kg/6.5 kg without/with battery

Ordering information

VOR/ILS Analyzer	EVS200	0796.1800.02
Options		
Battery (optional)	EVS200-B1	0796.2012.00
Remote-Control Software	EVS200-SWF	0798.4358.00
Application Software for analysis and display of results	EVS200-SWA	0798.4287.00
Software for additional analyses	on request	
Weatherproof case with 2 straps	EVS200-T	0798.4264.00