



Discover the Experience

# Wideband Radio Channel Emulator EB Prosim C2

## Improve Quality and Reduce Time-to-Market of Your Wireless Design

EB Prosim C2's high technical performance and accuracy helps to reduce the time-to-market of

wireless products by speeding up all phases of the product development cycle, and enabling detection of design errors at the earliest and least expensive stage of development. With the MIMO channel emulation capability, EB

Prosim C2 is a flexible test solution for product development, as well as for the integration and verification of MIMO-capable wireless designs and systems.





# Wideband Radio Channel Emulator

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<b>Number of fading channels</b>	up to 2 (4 channels with 2x2 MIMO option)
<b>Number of fading paths</b>	24/channel (12 paths with 2x2 MIMO option)
<b>Number of physical RF interfaces (IN and OUT) for fading channels</b>	up to 2
<b>Emulation interfaces</b>	RF, analog baseband, digital baseband
<b>RF frequency range</b>	350 MHz - 6 GHz
<b>RF bandwidth</b>	30 MHz
<b>RF input level</b>	-30 to 0 dBm
<b>RF output level</b>	-61 to -16 dBm
<b>ABB input level</b>	up to 630 mV p-p / 0 dBm
<b>ABB output level</b>	up to 630 mV p-p / 0 dBm
<b>DBB input</b>	up to 14 bits
<b>DBB output</b>	up to 14 bits
<b>DBB clock rate</b>	0 Hz - 30 MHz
<b>Path delay resolution</b>	0.1 ns
<b>Path delay accuracy</b>	+/- 1 ns
<b>Propagation delay (extended delay range)</b>	up to 400 $\mu$ s (1.6 ms optional)
<b>Delay profiles</b>	Constant, sinusoidal sliding delay, Linear sliding delay, 3GPP birth-death
<b>Channel combining and splitting</b>	Internal, digital
<b>Relative path attenuation</b>	0 - 60 dB
<b>Fading profiles</b>	Constant, Rayleigh, Rice, Jakes (Classical), flat, rounded, pure Doppler, Arbitrary (with external tools)
<b>Standard channel models</b>	GSM/GPRS/EDGE, 3GPP standard and deployment, 3GPP2, ITU 3G, JTC
<b>Doppler shift</b>	up to 23 kHz
<b>Vehicle speed</b>	up to 12 500 km/h
<b>Playback emulation of measured radio channels</b>	Yes
<b>Import of user defined channel models</b>	Yes
<b>Interference generator</b>	Internal (optional)
<b>Interference signal types</b>	AWGN, CW, GMSK, WCDMA-DL, 8-PSK, WCDMA-UL (optional each)
<b>RF local oscillator</b>	Internal (optional)
<b>Shadowing</b>	Internal (optional)
<b>Control PC</b>	Integrated (touch screen and keyboard)
<b>ATE connections</b>	Ethernet, GPIB
<b>Power supply</b>	90 - 240 V, 50/60 Hz, 500 W
<b>Mechanical dimensions (h x w x d)</b>	320 x 430 x 510 mm
<b>Weight</b>	27 kg

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