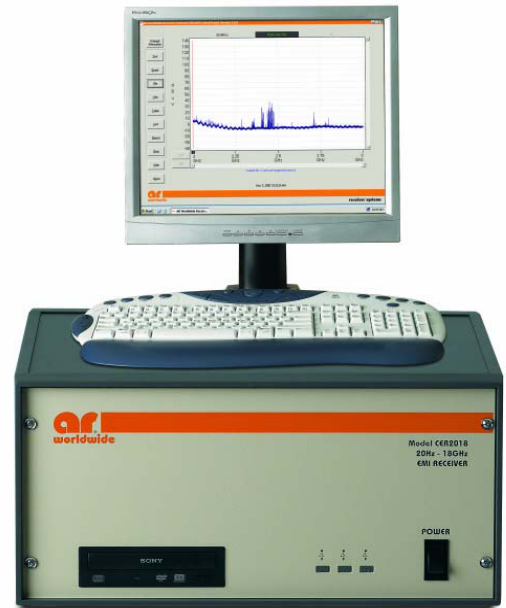


**Model CER2018
20Hz-18GHz
EMI Receiver**

The CER2018 Compliant Emissions Receiver is a complete EMI test solution, offering continuous coverage from 20 Hz to 18 GHz and optional expandability to 110 GHz. Combining state-of-the-art sensitivity, dynamic range and accuracy with convenience of operation, the CER2018 boasts a proprietary built-in auto-stabilization approach for extended intervals between calibrations.

The CER2018 implements a revolutionary approach to microwave and millimeter wave EMI testing, employing a remote host fixture with a family of plug-ins, each with its dedicated on-board auto-stabilization subsystem. The user can now work at distances up to 500 feet from the main instrument, at frequencies to 110 GHz. Remote modules for the 3-18, 18-40, 40-60, 60-90 and 75-110 GHz bands may be acquired and used in any combination, with control and band selection performed in the comfortable location of the main receiver.

The CER2018 EMI receiver system includes a built-in computer, operates under Windows XP and interfaces with standard data storage and high resolution video devices. Also included is a 19" flat screen monitor, keyboard and mouse.



Receiver Systems Benefits

- Easy to use – all functions are menu driven; there is no reason to fiddle with switches, buttons and sliders.
- Separately housed upgrades are available to 40, 60, 90 or 110 GHz at a reasonable cost.
- Parallel measurement and simultaneous display of peak, quasi-peak, RMS and CISPR average.
- Programmed-in test formats include CISPR 22, CISPR 11, MIL-STD 461/462, ANSI C63 and FCC.
- Fully compliant with latest CISPR 16-1-1.
- Internal, wideband stability performance check.
- Six menu selected antenna inputs facilitate automatic wideband test setups as required in EMC specifications.
- Backed by AR Quality = Value promise, including a three year warranty.

SPECIFICATIONS

FREQUENCY RANGE

CER2018 Base System	20 Hz – 18 GHz
Handheld Expansion Option	Adds 18 – 40 GHz
Remote Expansion Option 1	Adds 3 – 18 GHz
Remote Expansion Option 2	Adds 18 – 40 GHz
Remote Expansion Option 3	Adds 40 – 60 GHz
Remote Expansion Option 4	Adds 60 – 90 GHz
Remote Expansion Option 5	Adds 75 – 110 GHz

Remote expansion units plug into the main remote fixture and are available individually or as a full set. Frequency expansion subsystem can be located up to 500 feet from main system. Individual frequency expansion units accept dedicated antennas and are software selectable.

FREQUENCY STEP SIZE

20 Hz – 9 kHz	Fast Fourier Transform
9 kHz – 3 GHz	1/10 of IF Bandwidth
3 – 110 GHz	1/10 of IF Bandwidth > 10 kHz 4 kHz for IF Bandwidth = 10 kHz

TUNING SPEED

< 120 μ S

LEVEL MEASUREMENT ACCURACY

<9 kHz	2.5 dB
9 kHz – 3 GHz	1.0 dB
3 GHz – 18 GHz	2.0 dB
18 GHz – 110 GHz	3.0 dB

STABILITY OF INTERNAL FREQUENCY STANDARD

± 0.4 ppm over operating temperature range
± 0.5 ppm first year
± 2.0 ppm first ten years

SENSITIVITY FOR S/N = 0 dB in 1 Hz band (Equivalent Input Noise Density)

9 kHz – 18 GHz	< -166 dBm (-59 dBuV)
18 GHz – 40 GHz	< -164 dBm (-57 dBuV)
40 GHz – 110 GHz	< -161 dBm (-54 dBuV)

THIRD ORDER INPUT INTERCEPT POINT

9 kHz – 3 GHz	> -7 dBm (preamp off); > -20 dBm (preamp on)
3 GHz – 18 GHz	> -20 dBm
18 GHz – 110 GHz	> -24 dBm

DYNAMIC RANGE (1 dB COMPRESSION POINT/INPUT NOISE DENSITY)

9 kHz – 18 GHz	> 158 dB
18 GHz – 40 GHz	> 156 dB
40 GHz – 110 GHz	> 149 dB

IMAGE REJECTION

> 80 dB

IF REJECTION

> 80 dB

PRESELECTION

Fixed preselectors standard; notch and tracking preselectors optional

IF BANDWIDTHS

100 Hz, 200 Hz, 1 kHz, 9 kHz, 10 kHz	9 kHz – 30 MHz
10 kHz, 100 kHz, 120 kHz, 1 MHz	30 MHz – 110 GHz
10 MHz	1 GHz – 110 GHz

INPUT ATTENUATOR

20 Hz – 18 GHz	0 – 75 dB in 5 dB steps
18 – 110 GHz	0 dB or 30 dB (single step)

IF OUTPUTS (rear panel)

455 kHz, 21.4 MHz, 160 MHz

DEMODULATION

AM, FM

OPERATING SYSTEM & PROCESSOR

Microsoft Windows XP Professional, embedded single board computer

DATA STORAGE

Internal CD and 130 GB Hard Drive (HDD) (removable HDD available)

INTERFACES

4 USB ports (1 front panel, 3 rear panel); IEEE-488; serial printer port
--

VIDEO OUTPUT

VGA (1024 x 768)

DIMENSIONS (W x H x D)

122.6 x 21.9 x 53.4 cm (19 x 8.75 x 21 in)
--

WEIGHT

25 kg (55 lbs)

AC SUPPLY

90–250 V, 50–60 Hz
