

EM-ISight-4 20- 40GHz Upgrade Program



Technological advancements are achieved on a daily basis and many research and development teams need to have access to the latest tools. APREL have launched an Upgrade Program for existing EMISight owners that extends the frequency range up to 40GHz. This upgrade program has been developed for an easy transition from the standard 6GHz option to 20 or 40GHz.

EM-ISight Upgrade Program eliminates potential for legacy due to technology advancements, changes in protocol, devices operating with higher clock speeds or use of a higher spectrum allocation primarily those relating to 3<sup>rd</sup> up to 10<sup>th</sup> harmonic or 40GHz. The upgrade is easy to install onto the user's existing EM-ISight. This will enable current users of EM-ISight to continue working with very little disruption to their normal activities with the ease of integration for the upgrade. The upgrade program is a cost effective way to grow the applications of EM-ISight while using our proprietary single probe solutions. No other system manufacturer offers a single probe solution up to 40GHz.

## **Applicable Standards**

IEC-61967-1-6 VCCI/CISPR 22/FCC Pt 15/22 EN55022 CISPR 12/FCC Pt 18/EN55011/ EN60555/VDE0871 EN55024/EN6100-6-4/GR-1089-CORE ITU-T/ETS300/ IEC-6100-3

## **Applications**

Integrated Circuit/Printed Circuit Board Wireless modules
De-Sense testing (receiver circuits)
Medical devices
Automotive and aviation
Electronic device emissions
Pre-Compliance testing (emissions/susceptibility)
Quality control/audit
Consumer products cell phone/computer devices
Susceptibility / ESD



NOTE: Signal generator, spectrum analyzer is customer supplied.

Some applications require additional upgrades from a standard package spectrum analyzer; please confirm spectrum analyzer compatibility with APREL.

Subject to change without notice E&OE

## **Upgrade Highlights**

- Single probe solution from 10kHz to 20GHz
- Single probe solution from 10kHz to 40GHz
- Upgraded boundary detection unit from SMA to K-Type with Spiro Flex
- Micro Stripline from 6GHz to 40GHz (fully characterized)
- Higher spatial resolution
- Calibration module for 40GHz
- K Type RF cables
- Advanced peak location analysis
- Multi-layer vector graphing
- 3D over 4D distribution plotting
- Improved dynamic touch detection
- Improved measurement uncertainty
- Vector scan routines
- Distance scans
- Field distribution analysis using horizontal probes (X/Y/Z)
- X, Y, Z Vector analysis of magnetic fields

## **Application Highlights**

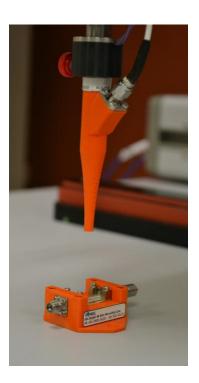
High-speed Either Net IC/ Systems
High-speed connectors and IO interfaces
10GB Ethernet transceivers
Optical Transceivers
Third up to 10<sup>th</sup> Harmonic analysis on,

- HDMI
- 3G/4G AWS/BRS/ABS
- 802.11abgn
- 802.11ac
- USB 3.0
- Intel CPU i5
- Intel CUP i7 965 Extreme
- AMD FX-81xx
- AMD A4-34xx
- AMD A6-36xx
- AMD A8-38xx
- Frequency Multipliers

Other applications and technologies can be tested with the 40GHz system upgrade. The examples presented are highlights of key technologies' which have been assessed using EM-ISight.



Custom mobile shields available for purchase with EM-ISight Systems



**Optional Accessories** 

Mobile Shield for isolation of ambient sources (-145dBm >700MHz)
E-Field Antenna Probe
Dual Stage Low Noise Amplifiers DC to 40GHz
FFA Far Field Approximation Software
USA Ubiquitous Server Application
ESD/Susceptibility Test Suite (available winter 2015)
Robot mounted vision camera with 2.2µm pixel size and auto zoom