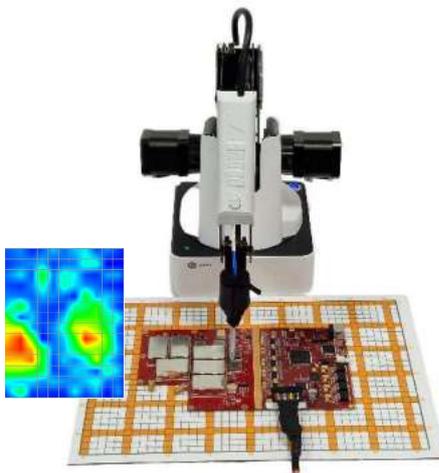


# EMProbe

## Datasheet

### Accurate and Repeatable High-Resolution EMC and EMI diagnostic with a single probe, Robotic Arm on your lab-bench



Using Handheld probes to identify and resolve EMC/EMI issue testing has never been this accurate. 3D Precision Technology used to assist high density board designers to use off the shelf hand-held probes and/or Y.I.C. Technologies probes and visualise the root causes of potential EMC and EMI problems during pre and post EMC compliance testing.

EMC and signal integrity are major concerns in the design of high-speed PCBs. While **EMScanner** allows designers to easily locate emission by placing the PCB on its flat surface, the **EMProbe** allows users to test the component side of the PCB and adjust the height of the scan.

This enables the design engineers to diagnose EMC/EMI problems limited only by the choice of the Spectrum Analyser and the Near Field Probe and allows them to visualize the root causes of potential EMC and EMI problems of a non-flat surface or of a complete product.



**ADDITION:** *EMProbe Extension – X Axis increase reach to 900mm.*

During any new product development process, design engineers must find, characterize, and address unintended radiators or RF leakage to pass compliance testing. **EMProbe** allows board designers to pre-test and resolve EMC and EMI problems early on, thus avoiding unexpected EMC compliance test results.



**EMProbe** delivers **repeatable** and **reliable** results that pinpoint the cause of a design failure. As a result, the user can personally test the design without having to rely on another department, test engineer, or time-consuming off-site testing. After diagnosing even an intermittent problem, the engineer can implement a design change and retest. The results provide concrete verification of the effectiveness (or not) of the design change.

The **EMProbe** solution consists of a computer controlled Robotic Arm, Near Field probe and a customer-supplied spectrum analyser, all controlled by the **EMViewer** Software.

Even though **EMViewer** software is recommended the user can also control the **EMProbe** through the robotic arm manufacturers API.

The **EMProbe** diagnostic capabilities allow design teams to **reduce testing time** by more than two orders of magnitude. Users have also documented 50% reductions in design cycle times. This allows the design team to immediately analyse and compare design iterations.

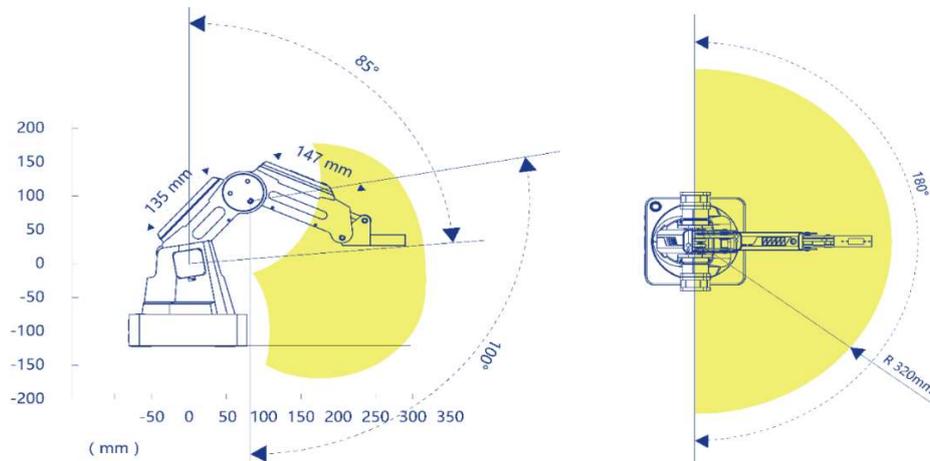
Ideal projects for the **EMProbe** are components side testing of boards designed for high speed, high power, and/or high density/complexity. Any PCB that places a premium on board real-estate also qualifies as an excellent candidate.

The **EMProbe** provides an **easy-to-use, cost-effective, and scalable solution** for design teams. Emission, immunity, filtering, EMI shielding, broadband noise and Common Mode testing are some of the applications that the **EMProbe** system addresses in mere seconds.

## Features & Specifications

<b>Capability</b>	Spectral scan, spatial scan, peak-hold, continuous scanning, spectral and spatial comparison, scripting, limit lines and report generation.
<b>Supported Spectrum Analysers</b>	<a href="https://yictechnologies.com/compatible-devices/">https://yictechnologies.com/compatible-devices/</a>
<b>Supported Operating Systems</b>	Windows 10/11®
<b>Supported CAD overlays</b>	Standard Gerber® RS274x format, HPGL format and JPEG
<b>Max Frequency coverage</b>	Up to 14GHz with the supplied Y.I.C. Technologies Probes
<b>Spatial resolution</b>	High Resolution: 7.5mm to 0.2mm
<b>Scan area</b>	300 mm Radius
<b>Scan Height (Max)</b>	150 mm Radius
<b>Frequency accuracy of peaks</b>	Peak marking accuracy of spectrum analyser
<b>Probe to probe uniformity</b>	Dependent on the selected probe
<b>Maximum radiated power load</b>	Dependent on spectrum analyser and the probe performance
<b>Operating temperature</b>	From 15° C to 40° C (continuous spectral and spatial scans at 50 MHz)
<b>NET Weight</b>	3.40Kg (Excluding cables and the adaptor)

## Workspace



## Included Probes

### Y.I.C. Technologies **NFP**Set

#### Set of 5 Probes

#### Electric and Magnetic Probes

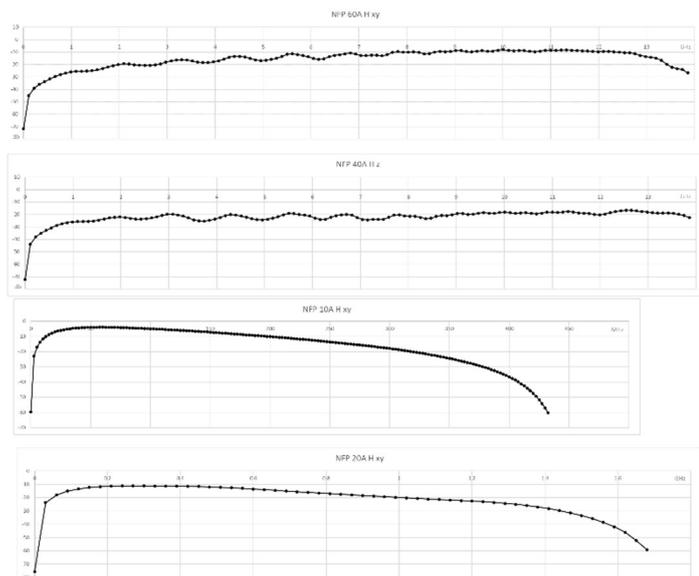
HXY 10A02: 10 MHz – 300 MHz

HXY 20A02: 100 MHz – 1.4 GHz

HZ 40A02: 1 GHz – 14 GHz

HXY 60A01: 1 GHz – 13 GHz

E 00A02: 1.6 GHz – 18 GHz



[www.yictechnologies.com](http://www.yictechnologies.com)

If you can **see** it, you can **fix** it!