



InSite™ FAQs

As of 6/18/03

Q: Why was InSite developed?

A: *In the process of developing PowerStream™ - our breakthrough new high-speed powerline communications technology - we were faced with the challenges of guaranteeing robust, reliable network communications for a large number of nodes with QoS. Fortuitously the PowerStream™ effort required that we accurately model the powerline and we developed our own simulation tools to accomplish this. Understanding the challenges that any company will have developing communications on impaired-media in complex environments and having over 20 years of intensive research and development experience in this area, it was apparent to us that others could greatly benefit by gaining insight into their performance in advance of design and implementation at an installation site--hence the name I-n-S-I-t-e. InSite™ is a highly valuable tool for customers who are contemplating the use of Adaptive's technology--struggling to commit to develop communications solutions on impaired-media in complicated application environments that are high-speed, reliable and robust.*

Q: Which communications technologies can be simulated on InSite™?

A: *InSite™ can simulate performance for any communications on impaired-media technology including powerline, phoneline, wireless and cable. In particular, InSite™ has been designed to simulate Adaptive's AN Pro-Line™ and PowerStream™ powerline communications technology but it can be configured using the MATLAB-based toolboxes to simulate virtually any environment.*

Q: For what type of application environments can InSite™ be used?

A: *Virtually any environment can be configured such as homes, buildings, power distribution grids, air, ground, sea and rail vehicles. InSite™ is particularly valuable for simulating specific applications within these environments. For instance factory automation, home networking entertainment and broadband communications. Since InSite™ is MATLAB-based, it uses toolboxes that are configurable in a multitude of ways.*

Q: What inputs are made to run the simulations?

A: *The first step entails collecting information about the proposed application environment including a schematic of the type(s) of wiring, properties of the wires, network device specifications and specific noise and channel model parameters.*

Q: What information does InSite™ simulate?

A: *InSite™ takes the network channel and noise models to simulate throughput speeds and Bit Error Rates (BER)*

Q: What frequencies can simulations be run at?

A: *InSite™ is configurable to run simulations at frequencies from kHz to Mhz.*

Q: How accurate are the simulation performance results?

A: *It depends on the accuracy of the noise and channel model inputs. If the inputs are consistent with the real world environment, results will be accurate.*

Q: Is InSite™ a realtime hardware tool? Are modems attached to either end of the simulator?

A: *No, InSite™ is a MATLAB-based software program. That is what makes InSite™ so valuable--you don't have to have a fully designed and built piece of hardware.*

Q: Which version of MATLAB and Toolboxes do I need in order to run InSite™?

A: *The version itself is not important but the toolboxes are. More information on the toolboxes can be obtained as an inquiry proceeds.*

Q: Has InSite™ been commercially deployed?

A: *Yes, InSite™ was instantiated and deployed in July of 2002.*

Q: Is InSite™ available for purchase and use? How is InSite™ made available?

A: InSite™ is available today and can be obtained in a variety of ways. Depending on the customer need, Adaptive can provide InSite™ as part of an evaluation & design contract associated with Adaptive's powerline products; through a software license for single or on-going use; or as part of a major effort in which Adaptive actively works with a customer to model & input an environment and run simulations. An on-line trial version of InSite™ software will soon be made available for customers to run sample simulations. These simulations will make it possible for interested parties to experience InSite's™ ability to simply and effectively simulate performance for sample application environments of a limited and defined size. For more information on obtaining InSite™ please contact us at 617-969-4050 x28 or by email at sales@adaptiventworks.com