

# Applications for SourceXpress® and AWG70000/5200 series generators

## Environment Plug-in Datasheet



The Tektronix Environment signals plug-in is a simple and flexible tool to create real world scenarios for commercial, electronic warfare, and simulations for monitoring and receiver testing. The plug-in integrates into the SourceXpress waveform creation platform, and the AWG70000 series and AWG5200 series arbitrary waveform generators.

### Key features

- Build a variety of scenarios (up to 50 scenarios)
- Flexible emitter control
  - Large selection of emitters available
  - Add up to 100 emitters to a scenario
  - Control the start time and duration of each emitter
  - Set power, center frequency/baseband offset, and starting phase of each emitter
- Compile scenario waveforms and scenario sequences
- Create RF/IF or IQ signal formats
- Time and frequency domain preview plots
- Import captured/user defined interference signals
- Offline mode
  - Capable to run on an external PC via the SourceXpress application, thereby reducing the time taken to synthesize large waveforms and leaving the instruments free for continued testing

1 Requires a Radar plug-in license.  
 2 Requires an OFDM plug-in license.  
 3 Requires an RF Generic Signals plug-in license.

- Seamless transition between design and playback
  - The easy to use graphical user interface integrates seamlessly with the user interfaces of the SourceXpress PC application and the Tektronix AWG70000 series and AWG5200 series generators
- Designed for integration for automated test or manufacturing
  - Programmatic Interface allows for integration into existing workflows

### Flexibility

The Environment Signal Creation plug-in allows users to emulate the interference between signals to test receivers under realistic and worst-case conditions. Users can configure the various standard-specific parameters of these interfering signals, including power levels, start time, and duration.

The standard-specific emitters supported include:

Bluetooth	DVB-T	P25
CDMA	GSM	WiFi
W-CDMA	LTE	WiMAX

In addition to creating standard-specific emitters, users can create many other emitter signals such as:

Radar <sup>1</sup>	Digital modulation <sup>3</sup>	Tones
OFDM <sup>2</sup>	Pulses	User defined emitters to playback user created/captured waveforms
Analog modulation <sup>3</sup>	Noise	

### Requirements

- Plug-in installed with SourceXpress on PC:
  - SourceXpress software version 5.3 or greater
  - PC operating systems: Windows 7 (64 bit), Windows 8 (64 bit), Windows 10 (64 bit)
- Plug-in installed on compatible instruments:
  - AWG70000 Series, firmware version 5.3 or greater
  - AWG5200 Series, firmware version 6.0 or greater



## Ordering information

### Models

**ENVFL-SS01** Environment plug-in with a floating license that can be reassigned to different Tektronix instruments or PCs.

**ENVNL-SS01** Environment plug-in with a node locked license tied to a single instrument or PC.

The Environment plug-in can be downloaded for free and a trial license is available. Complete functionality and continued use requires the purchase of a license.

Visit the [SourceXpress](#), [AWG70000](#), or [AWG5200](#) product pages to obtain the software and license.

### How to purchase

To purchase, visit the Tektronix web site to request a quote or contact your nearest sales representative.

### Additional information

This and other plug-ins are available for SourceXpress and compatible waveform generators.

Use the following website links to view available application plug-ins, downloads, and trial licenses.

- [SourceXpress website](#)
- [AWG70000 Series website](#)
- [AWG5200 Series website](#)

### Licensing

Each plug-in (for SourceXpress, the AWG70000 Series generators, and the AWG5200 Series generators) requires the purchase of a license before they are functional. Some plug-ins may require additional licenses to unlock specific plug-in features. Licenses are managed within the Tektronix Asset Management System (Tek AMS). The Tek AMS website address is [www.tektronix.com/products/product-license](http://www.tektronix.com/products/product-license). Product license management requires a login account.

There are two types of licenses available: node-locked (NL) and floating (FL).

- Node Locked Licenses provide your own copy of the application on your instrument or personal computer and are permanently assigned to a specific Host ID or product model/serial number.
- Floating licenses can be moved between different Host IDs or product models.

Use the Tektronix Asset Management system to check in and check out floating licenses.



Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.



Product(s) complies with IEEE Standard 488.1-1987, RS-232-C, and with Tektronix Standard Codes and Formats.

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**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tek.com](http://www.tek.com).

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