

# SOLV™ Harmonic Analysis Software



## Key Features

**Friendly, easy-to-use interface**

**System and load parameters are entered with a simple one-line diagram editor**

**Built in library contains all Lineator™ AUHF filters and load models for alternate solutions**

**Powerful Simulation Engine provides fast and accurate analysis**

**Harmonic voltage and current distortion evaluation (VTHD & ITHD)**

**Ability to simulate dual scenarios to compare energy consumption and harmonic distortion**

**Performs Energy analysis**

**Calculates Telephone Interference Factor (TIF) and I\*T Product**

**View onscreen Waveforms, Spectrum and Phasor diagrams**

**Generates reports providing simulation summary with detailed IEEE 519 compliance, harmonic distortion, waveforms, spectrums and TIF reports**

**Ability to Export Harmonic Spectrum data to a Spreadsheet**

**Units can be set to Imperial or Metric**

## Say Goodbye to Costly Harmonic Studies

SOLV™ is a powerful simulation program that will calculate current and voltage distortion levels by simulating Adjustable Speed Drive (ASD) applications based on your load requirements. It includes models of the Mirus Lineator™ AUHF, the leading passive harmonic filter for ASD's. By simply entering some basic information about your source and ASD system, MIRUS' SOLV™ will help you find the right solution for your ASD application by accurately predicting the performance level you can expect without the need of a costly harmonic study.

SOLV™ also allows you to perform energy analysis by providing evidence of how energy can be saved by removing harmonic losses introduced by ASDs and justifying the use of Lineators based on energy savings. Its kW calculation includes all harmonic losses in transformers and cables and provides total kW, kVA and kVAR at the Point of Common Coupling (PCC) and Distribution Panel in the Summary Report. Dual scenario simulation capability allows you to compare two different configurations. SOLV™ eliminates the guesswork in evaluating the best performing solution for your harmonic challenges.

## A Useful Tool for any Power Quality Professional

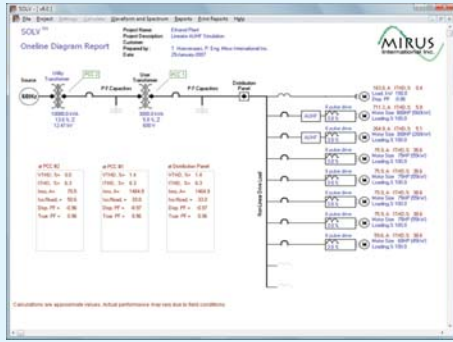
This software is a valuable tool for consulting and specifying engineers, utility operators, OEMs and anyone who needs to evaluate and compare solutions for treating harmonics in ASD applications. A trusted tool since 2004, SOLV™ is used by power quality professionals that represent a wide spectrum of industries including Oil & Gas, Marine, HVAC, Water/Wastewater, Industrial, Government, Education, to name a few.

## Downloading is Easy . . . and it's Free!

SOLV™ is a complimentary software from Mirus International. To get your copy of SOLV™ visit [www.mirusinternational.com](http://www.mirusinternational.com) and register for a free download.



# Simple One-Line Diagram Editor

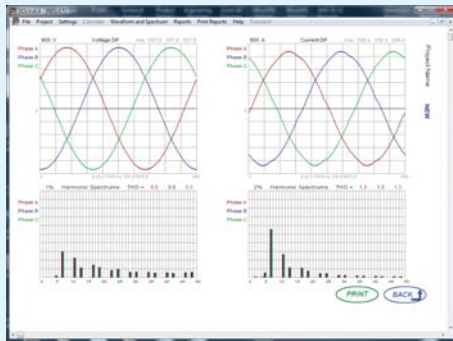


## SOLV provides an intuitive and easy-to-use One-Line Diagram editor.

The Electrical System is modeled from Basic Function Blocks including:

- The Electrical Source
- The Utility transformer or Generator
- The User Transformer
- Cables and PFC Capacitors
- Linear Load branch
- Non-Linear Load branches

# Waveform and Spectrum Viewer



## Waveforms and Spectrums

The 'Waveform and Spectrum' module provides selection for viewing waveforms and spectrum on points of interest:

- PCC # 2
- PCC # 1
- Distribution Panel
- Current PFC # 2
- Current PFC # 1
- Non-linear load detailed views

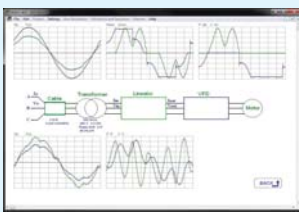
# View and Print Reports



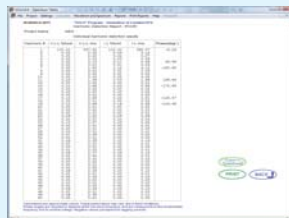
Simulation Summary



IEEE Std 519 Compliance



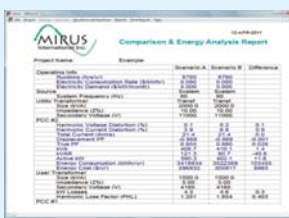
Non-linear Load Detailed View



Harmonic Distortion Report



TIF & I\*T Report



Dual Scenario Simulation Summary

## Report Module

SOLV™ is fully compliant with IEEE Std 519 with harmonic limits pre-set in the software. A number of other reports are also available including:

- Simulation Summary Report
- Harmonic Current Distortion IEEE Std 519 Compliance Table
- Harmonic Distortion Report
- Comparison and Energy Report
- Telephone Interference (TIF) Report

Reports offer a detailed outlook at each simulation run in the program giving users a valuable tool for recommending a solution, determining the performance of a solution and submitting a recommendation to outside parties. The dual scenario feature allows users to compare two methods to find the best system configuration.

