# Atyune

Atyune is a powerful application specifically created to facilitate the design of impedance matching circuits for Radio Frequency (RF) devices and antennas.

With Atyune it is possible to greatly speed up the antenna and RF design process: no need to create projects, set up variables, layouts or other time consuming operations; it can literally take less than one minute from starting the software to the final circuit.

Based on many years of experience on both theoretical development and practical implementations, Atyune is a great tool to have on the lab bench, as well as in the office to perform thorough analysis of RF and antenna performance.

Atyune easy to use interface suits lab technician with little or no RF experience, as well as highly skilled senior engineers.

Atyune offers wide range of innovative features and tools to simplify tasks commonly performed when designing matching circuits or handling S-parameters files. For instance, the built-in "Archive" allows safe storing of all the S-parameters files and easily retrieving them; the archive can be shared between many users at laboratory or company level.
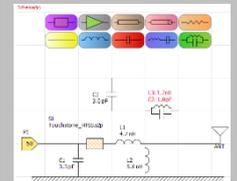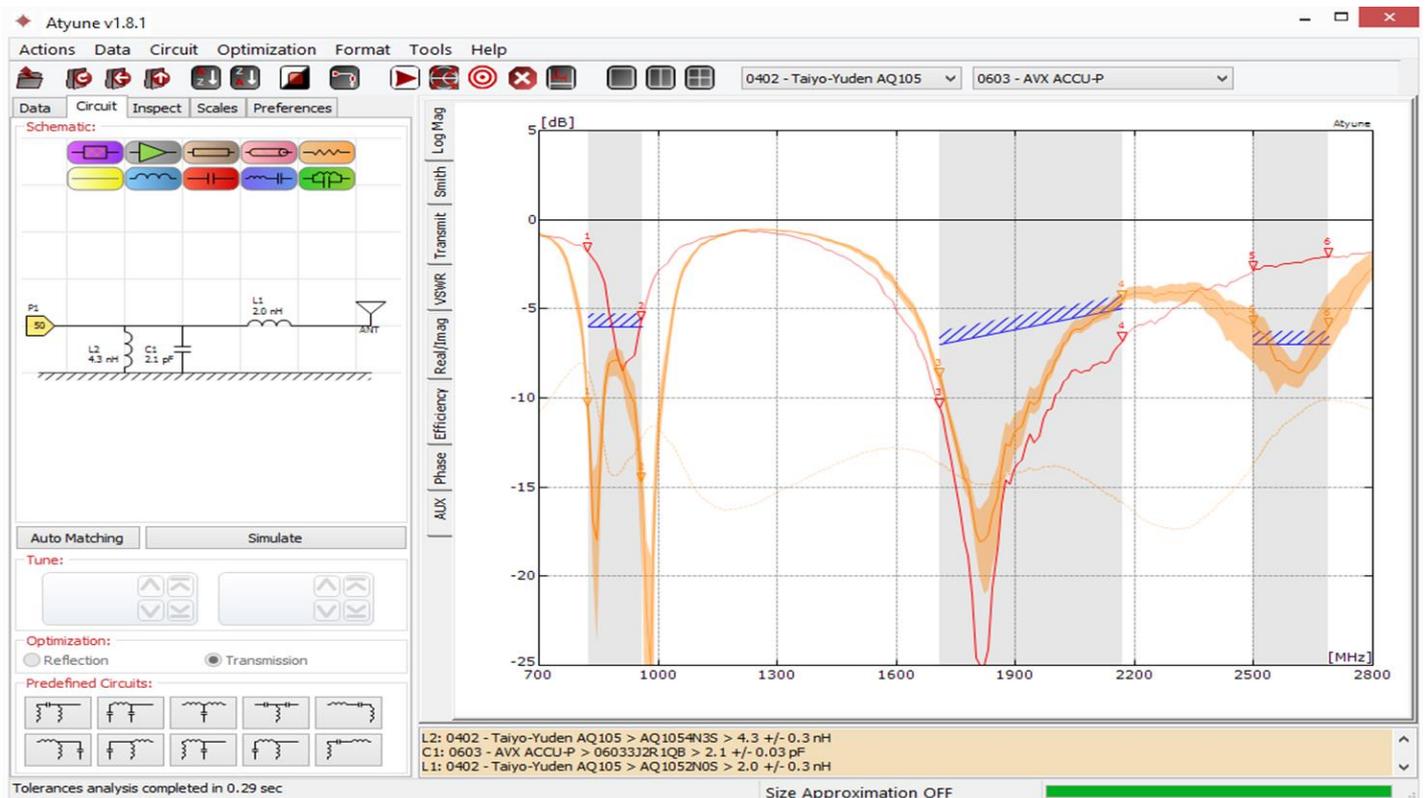

Circuit Editor
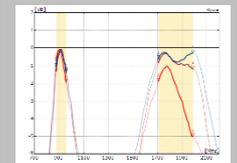
Delivered power

Multitrace Matching

MAIN FEATURES:

- Automatic generation of matching networks with up to 4 components
- Manual design of matching networks using the GUI, simply dragging new components from the toolbar
- Automatic optimization of arbitrary matching circuits
- Accurate library of real components (inductors, capacitors), expandable.
- Coaxial cables and microstrip lines models
- Optimization for maximum power delivered to the load (antenna) or minimum reflected power
- Automatic calculation and plot of losses in matching circuit
- Optimization targets definable by the user
- Unlimited number of optimization frequency ranges
- Comprehensive list of common communication frequency ranges, expandable by users
- Archive to easily store and retrieve measurements at laboratory/company level
- Multitrace Matching: Simultaneous matching of any number of S-parameters
- Exclusive electrical delay calibration
- First order approximation of layout
- Tolerances analysis in one click
- Two-ports networks optimization
- S-Matrix de-embedding
- Conjugate matching (port impedance definable using an S-parameter file)
- Publication quality graphs (vector format) that can be exported to PowerPoint/Word using the clipboard
- Clear frequency bands highlight
- Automatic markers' table
- Up to 4 different formats displayed simultaneously
- Operations on S-parameters (union, division, Q, Bandwidth Potential, average, envelope, phase difference...)
- Touchstone 2.0 support
- Data interpolation and smoothing
- User's defined naming and colouring schemes
- Wizard for combining separate S-parameter files into a single S-matrix in a very simple way.
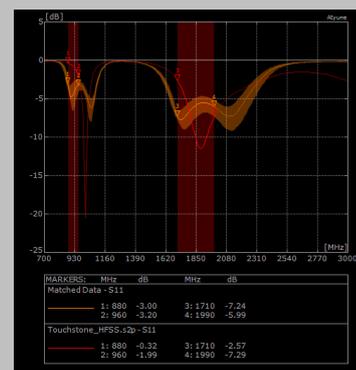
Tolerances Analysis
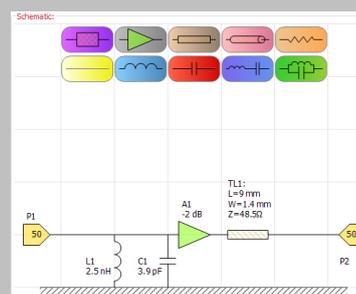
Two-ports circuit

Archive Interface

Number	Date	Project	User	Type	Ports	Description
S0000045	27/03/2012	30000	may	MEA	1	LTE Antenna with matching 15nsh+3p3se+1.2sh - State 11
S0000044	27/03/2012	30000	may	MEA	1	LTE Antenna with matching 15nsh+3p3se+1.2sh - State 10
S0000043	27/03/2012	30000	may	MEA	1	LTE Antenna with matching 15nsh+3p3se+1.2sh - State 01
S0000042	27/03/2012	30000	may	MEA	1	LTE Antenna with matching 15nsh+3p3se+1.2sh - State 00
S0000041	27/03/2012	30000	may	MEA	1	LTE Antenna without matching circuit - State 00

Filter:
Project: Any
User: Any
Search
Clear
Refresh
Load Data
Compare Data

System Requirements:
Windows XP, 7, 8, 10
RAM 512MB

Contact Information:
Devis Iellici, PhD
info@atyune.com
www.atyune.com