

Artificial Intelligence-based Filter Tuning Software

Keysight Technologies and SpaceForest

Reduce the cost and time of filter tuning with AI-based software

The continuing development of broadcast and wireless communications require the availability of filters, duplexers and multiplexers in very large quantities. Producing these devices in sufficiently high numbers is challenging due to the level of experience and expertise required to accurately tune them. Filter tuning can be a complex and costly task.

New filter tuning software from SpaceForest, when combined with a vector network analyzer from Keysight Technologies, can be used for automatic or manual filter tuning. The software can be used for tuning complex precision filters and multiplexers such as those used in broadcast (DVB), and wireless communications (GSM, DCS, UMTS, LTE).

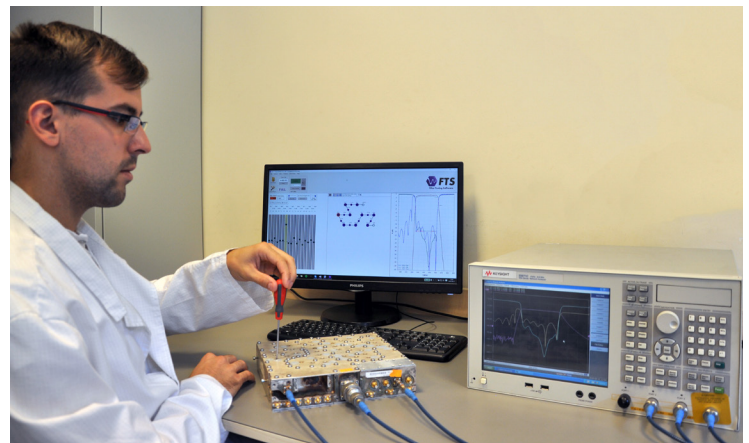
The SpaceForest Filter Tuning Software is based on artificial intelligence algorithms. It incorporates self-learning capabilities and an intuitive interface to allow easy adaptation for new filter types. The SpaceForest software minimizes the need for special skills when tuning complex filters reducing the cost and time of filter tuning during manufacturing.

The software is applicable to both manual and automated filter tuning processes. For automated production environments the software can be integrated with a single robotic arm or a multi-head automated tuning device. A multi-head device can be used to set the filter/multiplexer characteristics of up to 60 tuning elements simultaneously.

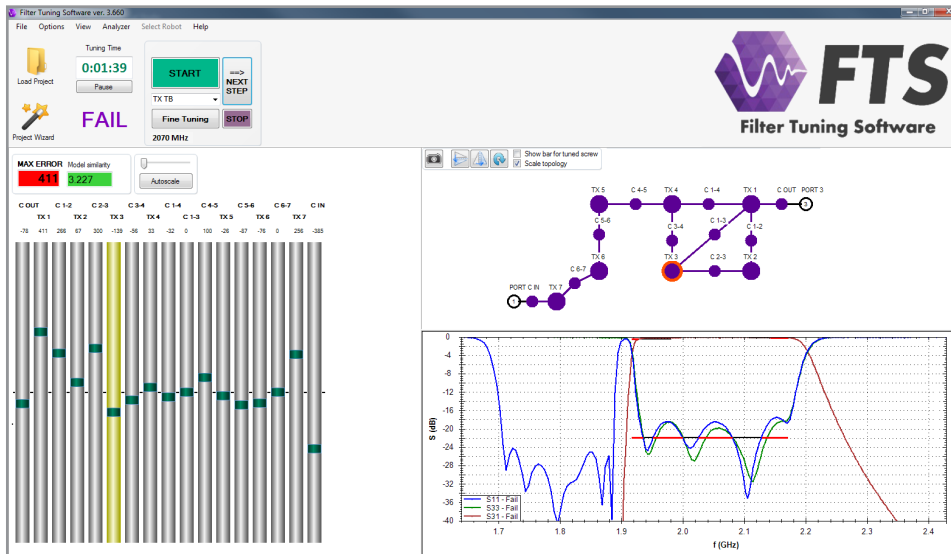
The tuning software is compatible with the Keysight ENA, PNA and FieldFox hand-held portable vector network analyzers.

SpaceForest's Filter Tuning Software with Keysight's Network Analyzers reduce the cost and complexity of filter tuning to speed the manufacturing of precision filters and multiplexers.

- AI-based software simplifies filter tuning
- Tunes complex precision filters and multiplexers
- Can be used for automated or manual filter tuning
- Automation with robotic arm or multi-head tuning devices
- Reduces cost and complexity
- Minimizes need for specialized skills
- Compatible with Keysight ENA, PNA or FieldFox network analyzers



Artificial Intelligence-based Filter Tuning Software



System Components

Keysight Technologies

ENA Series, or	Network Analyzer
PNA Series, or	Network Analyzer
FieldFox	Hand-held Network Analyzer

SpaceForest

Filter Tuning Software	Standalone or network license
	<ul style="list-style-type: none"> - User friendly topology entry wizard - Software AI training by use of Golden Filter example or filter equivalent circuit
Robotics Solutions	Optional for automated tuning
	<ul style="list-style-type: none"> - Integrated optical vision for more geometrically complex filters - Optional multi-head - Optional nut locking head

To learn how this solution can address your specific needs please contact Keysight's solutions partner, SpaceForest
www.keysight.com/find/spaceforest



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SpaceForest specializes in Artificial Intelligence and Video Recognition used in the optimization of industrial processes, in a variety of engineering disciplines related to Electronics, IT and Space-Tech.

www.spaceforest.pl

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