

Sonde Builder | User Guide

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Purpose

Sonde Builder creates **.sde Sonde definition files** for propagation-tool processing. It guides you through tool information, transmitter/receiver geometry, operating frequencies, measurement modes, and output channel pairs.

Getting started

1. Open **Sonde-Builder.exe** from the distributed application folder. No separate Python installation is needed.
2. Complete each page in order, using **Next >** to proceed and **< Back** to return. The stage buttons across the top become available as you progress.
3. Use verified tool specifications and channel definitions. The application records your entries; it does not independently certify that a tool design is physically correct.

Six-stage workflow

Stage	What to enter or check
1 Tool Information	Company, tool name, tool size, description, and length units (in or cm).
2 Geometry	Number of transmitters and receivers; position and four parameter values for each. Select Update Rows after changing a count.
3 Frequencies	Number of frequencies, frequency value, and three associated constants per row. Select Update Rows after changing a count.
4 Modes	For each mode, select transmitter, Receiver 1, Receiver 2, and frequency. The two receivers must be different.
5 Channels	For each output pair, enter phase/attenuation channel names, two mode references, and their compensation values.
6 Review	Examine the summary and SONDE FILE PREVIEW ; use Refresh if needed. Then select Create Sonde File .

Creating the Sonde file

On **Review**, select **Create Sonde File**. A standard Windows Save dialog opens with a suggested filename such as **TFAM-675.sde**. Choose the destination and save. Sonde Builder confirms the complete path when the file has been created. The file is written to the location you choose; there is no fixed output directory.

Important checks before using an .sde file

Verify units and all physical dimensions; transmitter/receiver assignments; frequency values and constants; mode relationships; phase and attenuation channel names; and compensation values. Compare the finished file with a known-good tool definition whenever possible.

Disclaimer and help

Select **Disclaimer** in the lower-right corner of the application to open the supplied PDF. Retain the complete distributed application folder so bundled resources remain available. If a page rejects input, follow the on-screen validation message and correct the indicated field.