

# DADiSP / TDMS

## TDM/TDMS File Module



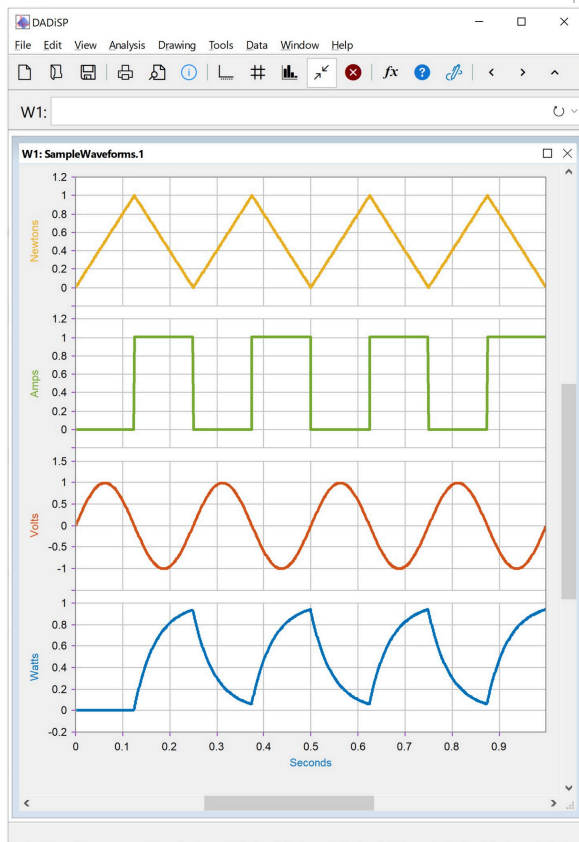
DADiSP/TDMS is a dialog based module to load and save data in the TDM (Technical Data Management) and TDMS data file format from National Instruments. TDM/TDMS files of any size and number of channels are supported.

DADiSP/TDMS imports the desired channels stored in a TDM/TDMS file and automatically applies the necessary channel specific sample rates and engineering units.

DADiSP/TDMS also supports exporting multiple dataset series to a TDM/TDMS file.

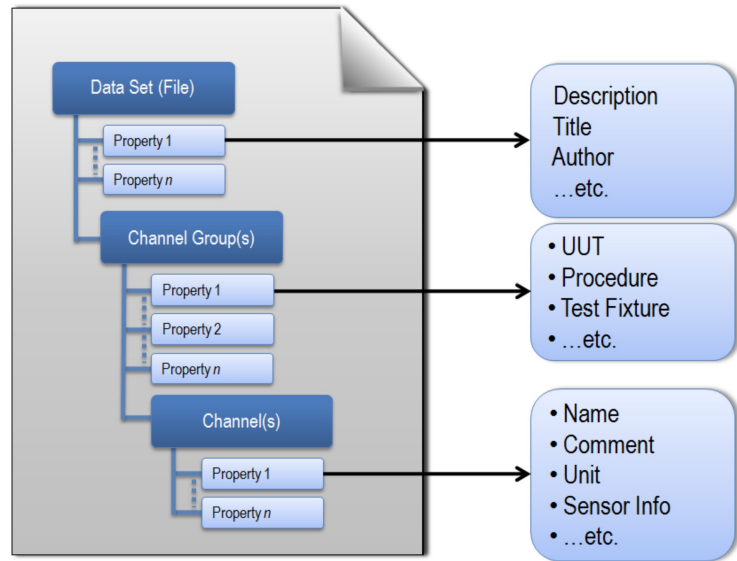
### KEY FEATURES

- Simple User Interface
- Fast and Direct TDM/TDMS Import
- Reads TDM/TDMS Files of any Size
- Applies Saved Channel Properties (sample rate, units, etc.)
- Automatic Display of Imported Channels
- Assign a Channel as Common X Values
- Convert Irregularly Spaced Data to Regularly Spaced
- Exports Multiple Series to TDM/TDMS Files



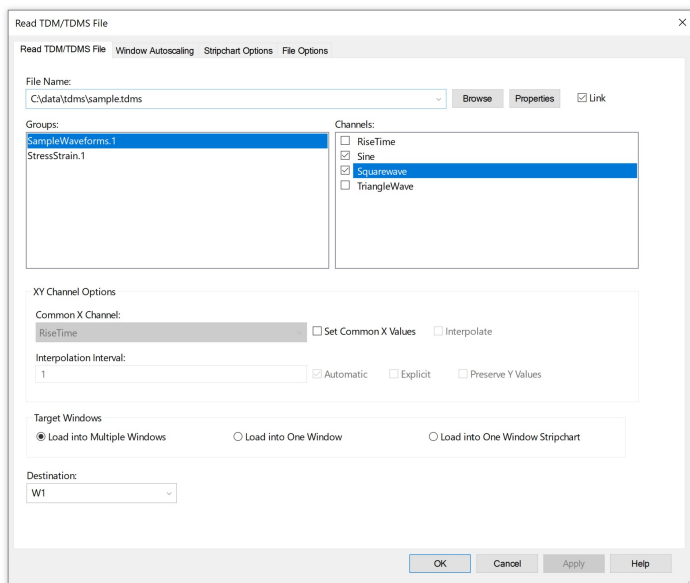
## TDM/TDMS File Format

The **Technical Data Management** file format, or TDM, is a hierarchical, binary data file format designed to store data from common test and measurement applications. The **Technical Data Management Streaming** format, **TDMS**, was introduced by National Instruments to facilitate high speed data streaming in a structured and easily exchangeable data file format. TDMS files are often employed by **LabVIEW™** and other National Instruments applications.



A TDM/TDMS file is organized in terms of groups and channels where a single file can contain multiple groups and a single group can contain multiple channels. This format is analogous to DADiSP's own internal Dataset (group) and Series (channels) data storage scheme. In addition, each file, group and channel can contain multiple user defined properties to help document the data.

When processing a TDM/TDMS file, an auto-generated index file optimizes access to the data parameters, increasing the speed of read operations on large data files.



## TDMS Load

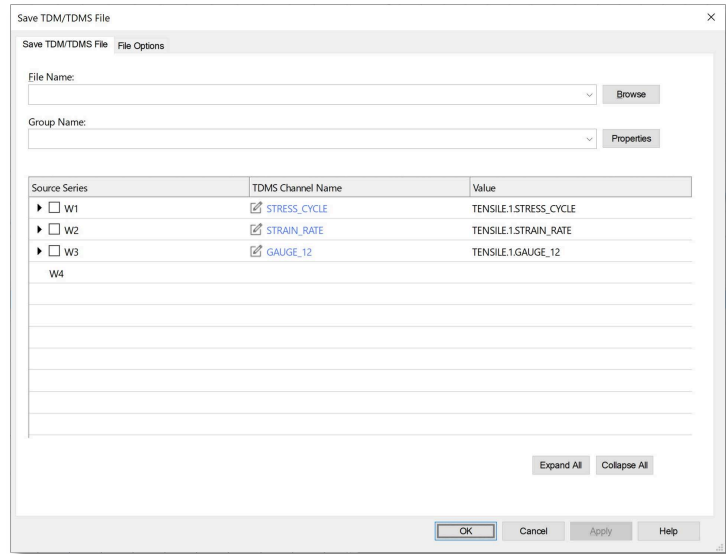
DADiSP/TDMS directly loads TDM/TDMS data files and automatically sets sample rate, time offset and engineering unit information for each channel. The channels can be loaded into separate Windows or combined into a single Window for display. Channel loading is optimized and buffered to provide quick access to large data files. X values can be specified from a common X channel and irregularly spaced series can be converted to more efficient regularly spaced series.

## TDMS Export Series

DADiSP/TDMS allows one or more DADiSP dataset series to be saved to a TDM/TDMS file. Each dataset name is mapped to a TDM/TDMS group name and each series name is mapped to a TDM/TDMS channel name. New series can be added to existing TDMS files.

## Simple Menu Interface

DADiSP/TDMS runs from the DADiSP worksheet and is accessed by a press of a button. The TDMS user interface displays important file information and supports the selection of individual TDMS groups and channels.



## Full Analysis System

DADiSP provides a complete analysis, display and processing environment using TDMS data. The integration of DADiSP/TDMS into DADiSP makes it easy to automate data import and analysis applications through SPL (Series Processing Language), macros, and command files.

## TDMS Data Formats

A variety of binary data formats are supported, including 8-bit integer, 16-bit integer, 32-bit integer, 64-bit integer, single and double precision float values.

## Requirements

DADiSP/TDMS requires [DADiSP 6.7 B01](#) or higher. [Contact us](#) for information about updating your current version of DADiSP.

## TDMS Functions

DADiSP/TDMS is a fully dialog based module. However, the following functions can be used on a standalone basis to import or export TDMS files.

## TDMS Functions

- tdmload    Load channels from a TDM/TDMS file into one or more windows.
- tdmread    Read multiple channels from a TDM/TDMS file.
- tdmsave    Save one or more arbitrary series to a TDM/TDMS file.
- tdmsaveds    Save one or more series from a dataset to a TDM/TDMS file.