

## TRNSYS 18 End-User License Agreement

Version 2017-04-03

### I. General

#### a) License versions:

1) Commercial licenses: TRNSYS commercial licenses can be purchased in packages of 1, 5, 10, 20, 30, 40, or 50 users for a given site. A site is defined as a department of a given company at a specific location which is the TRNSYS license holder. For the purposes of this license agreement, a location is defined as a physical locale. Branch offices of a single enterprise are considered to be separate locations. All users must be affiliated with the TRNSYS license holder.

2) Educational licenses: Educational licenses are to be for educational and research purposes at degree-granting institutions only (other non-profit organizations such as governments do not count as educational). Each educational license is a site license and can be purchased in packages of 10, 20, 30, 40, 50, 60, or 70 users for that specific department or research group. The TRNSYS license holder is the specific department or research group. TRNSYS may not be distributed to other labs in the same institution. All users must be affiliated with the TRNSYS license holder.

3) Licensing system: Users can choose between two licensing options. Please note that mixing of these two variants is not possible.

i) Node-lock: Node-lock: Each TRNSYS license allows the user to install a single instance of the Software on a given computer. No more users than the number of users of the license purchased have the right to use the Software at a given time (e.g. if a 10-user license is purchased no more than 10 users may use the Software at a given time).

ii) Network: Network: The floating license allows a user to use a license from any machine that can access the license server via the internet and has the program installed. A central license server dynamically allows licenses to float on the network, instead of being tied to a specific computer. This system requires a permanent Internet connection during the use of the software. No more users than the number of users of the license purchased have the right to use the Software at a given time (e.g. if a 10-user license is purchased no more than 10 users may use the Software at a given time).

4) Licenses are non-transferrable without the express written permission of the Producers.

b) Distribution of the TRNSYS manuals is prohibited.

c) Distribution of the TRNSYS source code is prohibited.

d) Distribution of the TRNSYS interfaces is prohibited.

e) Users may distribute internally developed TRNSYS components as they see fit. However, the Producers are not obligated to provide technical support for any user written components.

f) Users writing TRNSED programs may use them internally as they see fit. Users wishing to distribute TRNSED packages externally must follow the rules for applications using TRNSYS as described below.

g) Registered users of the TRNSYS program may receive technical support from the TRNSYS distributor from whom TRNSYS was purchased. A valid TRNSYS registration number must be included with any request for technical support.

h) A violation will terminate the license agreement.

## II. Additional licenses and acknowledgements

### a) HYDROGEMS

TRNSYS includes part of the HYDROGEMS library, which is developed by Øystein Ulleberg and other contributors at IFE, the Institute For Energy Technology, in Norway

### b) Weather Files

Weather files distributed with TRNSYS are copyrighted by their respective owners. They may not be redistributed in any form without prior consent from their owner. Neither the weather files owners nor The TRNSYS developers can accept any liability concerning the use of the weather files. The user shall be responsible for checking the correctness and plausibility of the results by applying state-of-the-art control procedures.

The TMY2 data sets for the US and their manual were produced by the National Renewable Energy Laboratory's (NREL's) Analytic Studies Division under the Resource Assessment Program, which is funded and monitored by the U.S. Department of Energy's Office of Solar Energy Conversion.

The weather files in the "Meteonorm" directory (and subdirectories) were generated using Meteonorm V5. MeteoNorm is published by METEOTEST (<http://www.meteotest.com>). Authors: METEOTEST, Jan Remund, Stefan Kunz

The TMY3 data sets and manual were produced by NREL's Electric Systems Center under the Solar Resource Characterization Project, which is funded and monitored by the U.S. Department of Energy's Energy Efficiency and Renewable Energy Office.

c) Additional contributions

Type 62 (Calling external programs - Excel) was originally programmed by Jochen Wriske and Markus Oertker at the Lehrstuhl für Technische Thermodynamik, RWTH Aachen

d) CoolProp routines are included with TRNSYS: Copyright (C) 2012-2016 Ian H. Bell and other CoolProp developers

e) Lapack routines are included into the package

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f) DAYSIM 4.0 routines and modified DAYSIM 4.0 routines are included in the package

Project DAYSIM <http://daysim.ning.com/page/download>

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OF THE TERMS AND CONDITIONS HEREIN.

g) Radiance Routines are used within the integrated DAYSIM 4.0 Routines

Project Radiance <http://radsite.lbl.gov/radiance/>

The Radiance Software License, Version 1.0

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III. Distributed TRNSED Programs

a)Definitions:

1. A TRNSYS distributor is the company who has a right to sell TRNSYS and who sold TRNSYS to the TRNSYS license holder. A TRNSYS license holder is the original purchaser of the complete TRNSYS package. A TRNSYS license holder may also be a TRNSED application developer.

2. A TRNSED application developer is a TRNSYS license holder who has contacted their TRNSYS distributor and received a TRNSED key. A TRNSED user is the party that uses the TRNSED application created by the TRNSED application developer. An agreement is a signed contract between a TRNSED application developer and a TRNSYS distributor that concerns one individual TRNSED application.

b) A TRNSYS license holder may not sell a TRNSED application that they have created without first obtaining a signed license agreement with their TRNSYS distributor. The following rules apply to such license agreements.

1. All agreements are to be negotiated separately with the local TRNSYS distributor. NOTE: The rest of the TRNSYS group will be consulted concerning all agreements.

2. All contracts concerning TRNSED applications are confidential and may not be discussed with other groups/users.

3. The entire stock of current TRNSYS distributors will receive a free copy of any such program (with documentation) to double-check that this license agreement has been upheld and that the program conforms to the intended application of the TRNSED program.

4. In the TRNSED application documentation, the TRNSED user must be made aware that they can upgrade to the full TRNSYS package for an additional fee from any standard TRNSYS distributor.

5. Any agreement applies only to the current version of TRNSYS and to the intended TRNSED application. Future versions of TRNSYS and the TRNSED application require separate contracts.

6. No TRNSYS source code may be distributed.

7. The only executable programs that may be distributed with a TRNSED application are trnsed.exe and trnsys.exe. This does not apply to executables not associated with TRNSYS such as Adobe Acrobat Reader.

8. No third party front-ends may be developed for the TRNSED application. Such applications fall into a different category of TRNSYS-based applications and require a separate license agreement with the TRNSYS group.

9. The TRNSYS license holder/TRNSED application developer will provide all technical support to the users of the TRNSED application. As a TRNSYS license holder, the TRNSED application developer is still able to contact their TRNSYS distributor for assistance.

10. All TRNSYS input files must be encrypted so that the TRNSED user cannot determine the construction of the TRNSYS input file.

c) A TRNSYS license holder has the right to freely distribute TRNSED applications with the following restrictions:

1. The TRNSYS group will receive a free copy (with documentation) of any such program that they request.

2. The only executable programs that may be distributed with a TRNSED application are trnsed.exe and trnsys.exe. This does not apply to executables not associated with TRNSYS such as Adobe Acrobat Reader.

3. A trnsed.id file specific to the TRNSED application must be distributed with the TRNSED application.

4. The TRNSYS license holder's user18.id file may NOT be distributed with ANY TRNSED application.

5. In the documentation, the TRNSED user must be made aware that they can upgrade to the full TRNSYS package for an additional fee from any standard distributor.

6. No TRNSYS source code may be distributed.

7. The TRNSYS Dynamic Link Library (TRNDll.dll or TRNDll64.dll) that is distributed with the TRNSED application may only contain the TYPEs that are used by the TRNSED application.

8. No third party front end may be developed for the TRNSED application. Such applications fall into a different category of TRNSYS based application and require a separate license agreement with the TRNSYS group.

9. The TRNSYS license holder/TRNSED application developer will provide all technical support to the users of the TRNSED application. As a TRNSYS license holder, the TRNSED application developer is still able to contact their TRNSYS distributor for assistance.

#### IV. Derivative Works

This license does not cover applications developed that utilize the TRNSYS software such as web interfaces or other derivative works. A separate license agreement has to be made with the TRNSYS group for the distribution of derivative works.

#### V. Disclaimer

The TRNSYS source code was partially sponsored by the United States Government and the Government of France. Neither the United States, France, Germany, the United States Department of Energy, the French Scientific Center for Building Research, nor any of their employees, nor any of their contractors, subcontractors, or employees, including but not limited to the University of Wisconsin Solar Energy Laboratory, Thermal Energy System Specialists LLC, TRANSSOLAR Energietechnik GmbH and the Centre Scientifique et Technique du Bâtiment, makes any warranty, expressed or implied, or assumes any liability or responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or process disclosed, or represents that its use would not infringe privately owned rights.