# TRDA – Smoke Density Test Device with Light Measurement System

## Test device for determining the smoke production of materials during thermal decomposition in accordance with DIN 50055

The TRDA measuring device – thanks to its Integrated Single Board Computer with Windows operating system, TRDA software and highresolution color touch display – can be used in stand-alone mode for setting parameters and determining optical density and transmission. Interfaces and analog outputs enable connectivity to peripheral devices for the fast and easy export of data and facilitate use in existing fire testing systems. Comprehensive data analyses can be performed via an external PC or notebook. Optional accessories allow for use of the light measurement system on various types of exhaust duct systems and greatly simplify calibration, operation and cleaning of the components.

## Features at a Glance

* TRDA measuring device with SBC, 32-GB SSD, embedded Windows, 7“ color touch screen, measuring and supply modules and interfaces 1x RS232, 2x USB 2.0, 1x RS485, analog 0-1 V / 0-10 V, light emitter and light receiver
* Robust measuring light transmitter and receiver with integrated electronics for trouble-free transmission of the measuring signal up to 10 m
* Controller-based instrument with upgradeable firmware for maximum flexibility
* Operator guidance via high-resolution 7" touch screen with brilliant colors to portray all functions and measured results; intuitive icons for menu functions
* USB and RS232 interfaces for data communication with an external PC
* High on-board data storage capacity
* Data acquisition and data processing via external PC
* Extensive accessories for use in many fire-test systems
* RDG light emitter with 10-W halogen point light source and tempered, heatproof optics
* LRDE light receiver with silicon photo receiver; tempered, heatproof optics; spectral filter and integrated measuring light amplifier
* Mounting flange with connection for air purge and measurement bracket for pipe installation (option)
* Filter set for calibration, 6 optical filters, positioning cross, transport case (option)
* Single license for the TRDA software
* Also available as TRDL laser system (helium neon laser)