Spectroquant® thermoreactors

Simply comfortable

Developed in practice for practice, we offer a system of **Spectroquant® thermoreactors** that fulfils every conceivable requirement. Preinstalled standard programmes for routine digestions help avoid operating mistakes from occurring in the first place.

Features

- Practically oriented tuning of the digestion reagents to the thermoreactors
- Simple handling thanks to user-friendly description of the digestion procedures
- Flexible selection between standard programmes and individual programming
- Time-saving COD rapid digestion method

The eight standard digestion programmes of the Spectroquant® thermoreactor family for day-to-day routine use

Temperature	Time	Method
148°C	120 min	for COD
148°C	20 min	for COD (rapid digestion method)
150°C	120 min	for COD acc. to USEPA
120°C	120 min	for TOC
120°C	60 min	for total nitrogen, total contents of Cr, Cu, Ni, Pb, Cd, Fe, and Zn
120°C	30 min	for AOX and total phosphorus, cyanide
120°C	60 min	for Ag
100°C	30 min	

A description of the digestion procedures is already integrated in the instruction sheets included with the test kits. For special digestion variants there are applications available as downloads from the internet.

General technical data for all thermoreactors

Technical data	
Scope of delivery	Incl. integrated protective hood for the determination of COD and TOC, as well as of total contents of cadmium, chromium, copper, cyanide, iron, lead, nickel, nitrogen, phosphorus, silver, and zinc.
Display	LCD display for temperature and time, desired and actual values for heating time and temperature continually shown in the LCD display
Heater	On/off display (the LED blinks red during the heating phase and is permanently on during the digestion phase), contact guard on the surface of the heating-block

Spectroquant® thermoreactors at a glance

Spectroquant® TR 320 thermoreactor – the starter model

Functions

- 8 stored standard programmes
- Simultaneous digestion of 12 samples

Area of application

The instrument features all you need for handling digestions simply and correctly.

Spectroquant® TR 420 thermoreactor – the advanced instrument for experts

Functions

- Free temperature and time selection
- 8 stored standard and 8 free programmes
- Simultaneous digestion of 24 samples
- Thermosensor and PC cable available
- AQA documentation for control purposes
- Individual programming for future assignments

Area of application

The instrument already has all digestion programmes necessary for wastewater analysis preinstalled, but can also be individually used in the temperature range up to 170°C and with digestion times of up to three hours.

Spectroquant® TR 620 thermoreactor – the two-in-one instrument for professional use

Functions

- As for the TR 420 thermoreactor, but with two separate temperature-selectable heating zones

Area of application

As a two-in-one professional model this instrument features all the advantages of the TR 420. It has two separate controllable heating blocks, which makes it possible to run different digestion programmes at one and the same time. It is e.g. capable of simultaneously digesting 12 COD and 12 TOC samples at the different temperatures required, yielding results after just 120 minutes.

Spectroquant® thermoreactors

Spectroquant® Thermoreactor TR 320	Ord. No. 1.71200.0001
Holes	12 for cell tests ∅ 16 mm
Temperature selection	100°C, 120°C and 148°C ±1.0°C
Controlling accuracy	±1°C ±1 digit
Heating time	8 temperature heating-time programs for simplest possible operation: 148°C (20 min or 120 min), 150°C (120 min), 120°C (30 min, 60 min or 120 min), 100°C (30 + 60 min) automatic power switch-off at the end of the heating time
Mains version	115 V~ / 230 V~, 50 Hz / 60 Hz convertible
Dimensions	180 x 256 x 307 mm (H x W x D)
Weight	2.85 kg

Spectroquant® Thermoreactor TR 420	Ord. No. 1.71201.0001
Holes	24 for cell tests ∅ 16 mm
Temperature selection	Room temperature -170°C ±1.0°C
Controlling accuracy	±1°C ±1 digit
Timer	0 - 180 min freely selectable
Heating time	8 temperature heating-time programmes for simplest possible operation: 148°C (20 min or 120 min), 150°C (120 min), 120°C (30 min, 60 min or 120 min), 100°C (30 + 60 min), as well as eight freely selectable programmes, automatic power switch-off at the end of the heating time
Optional accessories	Thermosensor: heating-block temperature-monitoring option via integrated serial interface and control software for AQA, brass adapter with integrated Pt sensor fitting the holes incl. connector cable (for checking equipment)
Mains version	115 V~ / 230 V~, 50 Hz / 60 Hz convertible
Dimensions	180 x 256 x 307 mm (H x W x D)
Weight	3.6 kg

Spectroquant® Thermoreactor TR 620	Ord. No. 1.71202.0001
Holes	24 (2 x 12) for cell tests ∅ 16 mm, the temperature of each of the two heating zones can be set and controlled separately
Temperature selection	Room temperature -170°C ±1.0°C
Controlling accuracy	±1°C ±1 digit
Timer	0 - 180 min freely selectable
Heating time	8 temperature heating-time programmes for simplest possible operation: 148°C (20 min or 120 min), 150°C (120 min), 120°C (30 min, 60 min or 120 min), 100°C (30 + 60 min) as well as eight freely selectable programmes, automatic power switch-off at the end of the heating time
Optional accessories	Thermosensor: heating-block temperature-monitoring option via integrated serial interface and control software for AQA, brass adapter with integrated Pt sensor fitting the holes incl. connector cable (for checking equipment)
Mains version	115 V~ / 230 V~, 50 Hz / 60 Hz convertible
Dimensions	180 x 256 x 307 mm (H x W x D)
Weight	3.6 kg

Accessories for Spectroquant® thermoreactors

Thermosensor for thermoreactors TR 420/620	Ord. No. 1.71203.0001
The thermosensor measures the current temperature in the bore of the thermoreactor and compares it with the specified temperature. The results can be transmitted to a PC for documentation purposes.	

PC cable for thermoreactors TR 420/620	Ord. No. 1.71204.0001