# Spectroquant® Thermoreactors

## Consistent, thorough digestion

Developed in practice for practice, **Spectroquant® thermoreactors** offer everything you need for perfect sample preparation: reliability, simplicity, safety and future compatibility. Choose from pre-installed programs to avoid errors in routine use, or program your own methods for complete flexibility.


**flexible selection**
between standard and individual programs

**easy handling**
with our clear digestion guide

**two** temperature zones **in one** instrument (TR 620)

**Spectroquant® thermoreactors offer 8 pre-installed digestion programs for 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, Zn and Ag |
| 120°C | 30 min | for AOX and total phosphorus, cyanide |
| 100°C | 60 min | |
| 100°C | 30 min | |

**A description of digestion procedures is provided in the instruction sheets included with the test kits. Special digestion variants can be downloaded from: www.merckmillipore.com/aaf**

# 320

## Spectroquant® TR 320
**Ord. No. 1.71200.0001**

**Standard model for basic use**
12 holes | 8 pre-installed programmes

# 420

## Spectroquant® TR 420
**Ord. No. 1.71201.0001**

**Advanced device for frequent use**
24 holes | 8 pre-installed and 8 freely selectable programmes

# 620

## Spectroquant® TR 620
**Ord. No. 1.71202.0001**

**Two-in-one instrument for flexible use**
2 x 12 holes | 8 pre-installed and 8 freely selectable programmes | 2 heating zones, which can be controlled separately

| Technical data | | Spectroquant® thermoreactors TR 320 | TR 420 | TR 620 |
|---|---|---|---|---|
| **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 | ■ | ■ | ■ |
| **Functions** | 8 pre-installed programs | ■ | ■ | ■ |
| | 8 freely selectable programs | | ■ | ■ |
| | Simultaneous digestion of 12 samples | ■ | | |
| | Simultaneous digestion of 24 samples | | ■ | ■ |
| | Free temperature and time selection | | ■ | ■ |
| | Two separate temperature-selectable heating zones | | | ■ |
| | Thermosensor and PC cable available | | ■ | ■ |
| | AQA documentation for control purposes | | ■ | ■ |
| **Holes** | 12 for cell tests ø 16 mm | ■ | | |
| | 24 for cell tests ø 16 mm | | ■ | |
| | 24 (2 x 12) for cell tests ø 16 mm | | | ■ |
| **Temperature selection** | 100°C, 120°C, 148°C and 150°C ±1.0°C | ■ | ■ | ■ |
| | 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 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 245 x 292 mm (H x W x D) | ■ | ■ | ■ |
| **Weight** | 2.85 kg | ■ | | |
| | 3.6 kg | | ■ | ■ |
| **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) | | ■ | ■ |

| | |
|---|---|
| **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** |