

## SNPtower

- Genotyping of allele conditions extremely simple and fast
- Combines advantages of rapidPCR and simple endpoint detection
- Integrated genotyping software ASpect SNP
- Multi-component analysis
- Risk of contamination is significantly restricted
- Can be equipped with up to 6 excitation and emission filters of choice
- Applicable as simple PCR endpoint detector
- Ideal for routine diagnostic

## Optical System

**Principle of measurement** Top-reading fluorescence detection via 8 light fibre cables with color modules for excitation and emission filters

**Light source** High-power, long-life LED's

**Detector**

- CPM – channel photo multiplier
- Highly sensitive
- Decreased SNR

**Number of color modules** 4 (max. 6)

### Examples for 4 different color modules

Color module 1 (blue):  
EXC 475 nm; EM 515 - 530 nm  
(FAM, SybrGreen etc.)

Color module 2 (green):  
EXC 530 nm; EM 565 - 580 nm  
(HEX; JOE; VIC; TET; TMR; NED;  
Cy3; YakimaYellow etc.)

Color module 3 (yellow):  
EXC 565 nm; EM 615 - 645 nm  
(ROX; TexasRed; Cy3.5; EtBr etc.)

Color module 4 (red):  
EXC 625 nm; EM 685 - 730 nm  
(Cy5 etc.)

## Analytical Parameter

**Sensitivity**

- 1 nM FAM in minimal 15 µl PCR buffer (equals to 15 fmol FAM per well)

**Read out time**

- 4 sec for 96 wells independent of the number of spectral channels

**Microplate format**

- Ultrathin-walled 96 well microplate LP (low profile)

**Sample volume** 5 – 17 µl (max. 20 µl)

**Sample capacity** 96 in parallel

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### System and application parameter rapidPCR

Heating rate	12°C/sec max, (0.1 to 12°C/sec)
Cooling rate	8°C/sec max, (0.1 to 8°C/sec)
Block homogeneity	± 0,2°C
Control accuracy	± 0,2°C
Block temperature	4°C – 105°C
Time inc/dec	± 0.1 to 1 sec/cycle
Temperature inc/dec	± 0.1 to 1°C/cycle
Contact pressure	60 kg/plate
No. of programs	Not limited on PC
Run time	20 – 40 min depending on the application
Temperature control mode	<ul style="list-style-type: none"> <li>▪ Block control</li> <li>▪ (simulated) Tube control</li> </ul>

### Lid

- Heated sliding lid up to 120°C (manual or motorized opening/closing)
- SPS technology
- Automated pressing onto plate

### Other technical data

Weight	Approx. 10 kg
Dimensions (W x H x D)	240 mm x 430 mm x 255 mm
Power Supply	100 – 240 V ± 15% (47 – 63 Hz)
PC-interface	USB port
Software	<ul style="list-style-type: none"> <li>▪ ASpect SNP</li> <li>▪ Control and evaluation software</li> <li>▪ PCR run and fluorescence detection</li> </ul>
Guarantee	1 year warranty



Subject to changes in design and scope of delivery as well as further technical development!