



**DNA-TECHNOLOGY**



**DT SERIES REAL TIME PCR INSTRUMENTS**

# **DT SERIES REAL TIME PCR INSTRUMENTS**



## DESCRIPTION:

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### DT Series Real Time PCR Instruments:

- Reliable and sensitive instruments open for most kits
- Small footprint, low noise-level
- Bi-directional LIS-integration capability
- A wide range of pre-designed PCR assays and panels that allow for automated analysis and interpretation of the test results
- Create your very own protocols using our flexible design algorithms
- Support numerous applications including:
  - Pathogen detection, quantification
  - Quantitative analysis of microbiome
  - HLA typing
  - SNP detection

## FEATURES:

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- Outstanding thermal uniformity for maximum inter-run and intra-run reproducibility.
- Hot lid:
  - Secure clamping of tube caps, eliminating the possibility of spontaneous opening and contamination
  - Uniform heat distribution over the entire volume of the mixture
  - Prevents formation of condensation on the caps of the tubes
- Horizontal and vertical gradients for R&D: A useful option for optimization of conditions for amplification in order to attain maximum efficiency
- Simultaneous detection of a fluorescent signal in all wells of the heating block ensures uniform detection of fluorescence and fast run times
- Outstanding optical performance and compensation for fluorescence spill over for maximum sensitivity.
- Available in several different configurations of the optical system: 4 or 5 channels
- Narrow band filters minimize fluorescence crosstalk
- Tube height adjustment enables the use of different PCR tube formats.
- Small footprint helps to maximize your laboratory space
- Easy performance verification - the easy-to-use, cost-effective DT Check kit gives you confidence in your PCR results.
- Fleet control – manage multiple instruments from a single PC
- Automated data-analysis & results' interpretation
- The instrument is equipped with its own memory:
  - Stores the last protocol
  - Eliminates the possibility of data loss in case of external problems with their transfer

- Flexible and user-friendly interface of DTmaster software:

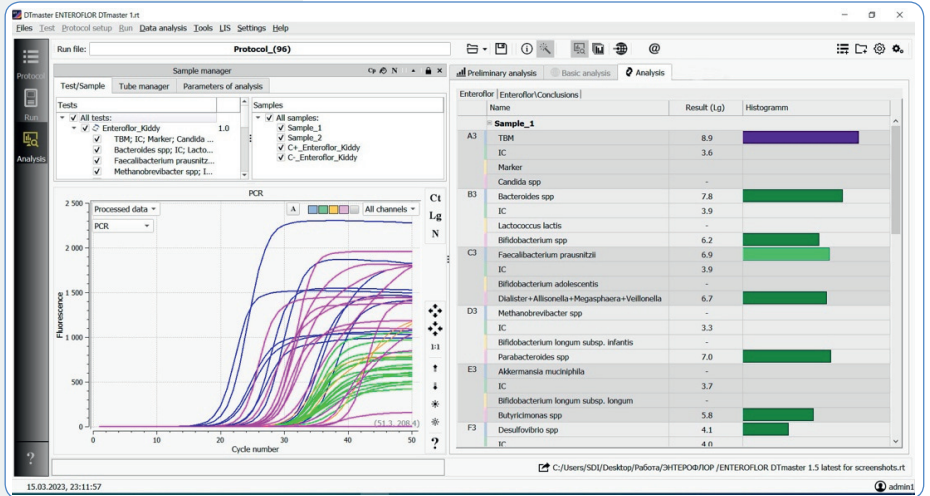


Fig. 1 Test results

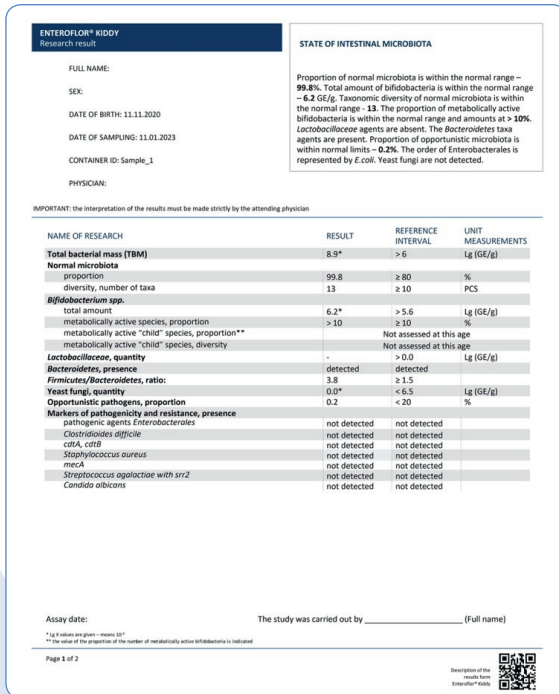


Fig. 2 Automated interpretation of the test results

## CUSTOMIZABLE CONFIGURATIONS TO MATCH THE NEEDS OF YOUR LABORATORY:



DTlite \*S1 can analyze up to **48 samples per run**

Suitable for **low throughput laboratories**



DTprime \*M\*\* is the perfect choice for a **medium throughput laboratory**

Can analyze up to **96 samples per run**

Instrument models with isolated thermal plate sections available for using multiple kits in a single run

**Temperature gradient**



DTprime \*X1 can analyze up to **384 samples per run**

Ideal for **high throughput laboratories**

\* – denotes the number of optical channels

\*\* – denotes the number of sections in the thermal block

	DTlite 4SI	DTlite 5SI	DTprime 4MI	DTprime 5MI	DTprime 5M3	DTprime 5M6	DTprime 4XI	DTprime 5XI
Number of optical channels	4	5	4		5		4	5
Sample capacity, wells	48		96			384		
Number of independent sections		1			3	6		1
2D temperature gradient		—		+				—
Sample volume, $\mu\text{l}$			10–100				5–30	
Hot lid, $^{\circ}\text{C}$			105 $\pm$ 1					
Operational range, $^{\circ}\text{C}$			0–100					
Accuracy, $^{\circ}\text{C}$			$\pm$ 0,2					
Uniformity, $^{\circ}\text{C}$	$\pm$ 0,3				$\pm$ 0,15			
Maximum ramp rate heating, $^{\circ}\text{C}/\text{sec}$			3,5				2,5	
Maximum ramp rate cooling, $^{\circ}\text{C}/\text{sec}$			2,5				1,5	
Average ramp rate heating, $^{\circ}\text{C}/\text{sec}$			3,3				2,1	

	DTlite 4SI	DTlite 5SI	DTprime 4M1	DTprime 5M1	DTprime 5M3	DTprime 5M6	DTprime 4X1	DTprime 5X1
Average ramp rate cooling, °C/sec	2,1							
Maximum temperature difference (thermal gradient /separate sections of thermal block), °C	—		8		8		—	
Excitation wavelengths, nm	470 530 580 630	470 530 580 630 687	470 530 580 630	470 530 580 630	470 530 580 630 687		470 530 580 630	470 530 580 630 687
Emission wavelengths, nm	515 560 620 660	515 560 620 660 731	515 560 620 660	515 560 620 660	515 560 620 660 731		515 560 620 660	515 560 620 660 731
Number of channels	4	5	4	4	5		4	5
Dimensions (WxDxH), mm	210x480x310							
Weight, kg	17				27			
Maximum power consumption, watt	550							



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