

The Labodam logo features a stylized green and white icon of a laboratory flask with three dots above it, followed by the word "labodam" in a bold, black, sans-serif font.

labodam



**REAL TIME PCR**

**LRTP-A20**

## REAL TIME PCR LRTP-A20

Real Time PCR LRTP-A20 is a thermo-cycler having 48 wells of sample capacity and require only 0.2 ml volume sample tubes. Features four detection channels, three block (16 tubes each block) configuration, alarm system, automatically controlled hot-lid for uniform pressure and heat preservation, compact design. Advanced temperature control system, powerful and user-friendly software system, novel fluorescence detection technology etc. ensures relative and complete quantification, precise differentiation and highly sensitive results in a single step procedure. It is used in diagnostic labs, molecular biology, genetic engineering, archaeology, forensics, etc.

### FEATURES

- ◆ Novel Fluorescent Detection Technology
- ◆ Amplification and Detection are simultaneously carried out
- ◆ Advanced thermoelectric refrigeration technology for steady and fast heating, cooling cycles
- ◆ Multi-point control of temperature for uniform heat distribution
- ◆ Four Thermo electric modules
- ◆ Independent control of temperature of three blocks
- ◆ Storage of PCR reagents at low-temperature
- ◆ LED light with long life as an excitation source
- ◆ Advanced fibre optic transmission technology for highly sensitive detection
- ◆ Extremely sensitive PMT and accurate optical path
- ◆ Wide linear range
- ◆ Multiplexing assay can be performed
- ◆ Includes continuous running mode

### SOFTWARE DETAILS

- ◆ Parameters like temperature, cycles, time, cooling/heating rate, detection channel etc. can be pre-set
- ◆ Records sample data
- ◆ Real-time display of heat-cycle, fluorescence detection
- ◆ Analysis of data
- ◆ Data saved in various formats like excel, TXT
- ◆ Data can be printed
- ◆ Storage of data
- ◆ Alerts the user during any fault

## APPLICATIONS

It is used for parallel amplification and quantification of fluorescent tagged DNA or RNA molecules. Widely used to diagnose genetic disease, detect infections in humans and environment, DNA profiling, research etc.

## SPECIFICATIONS

<b>Model No</b>		<b>LRTP-A20</b>			
Emission Wavelength		300 to 800 nm			
Excitation Wavelength		500 to 800 nm			
Sample Capacity		3 × 16 × 0.2 ml (Single tube or Strips 8 CPR Tubes)			
Dynamics Range		1-10 <sup>10</sup> copies			
Detected Fluorescence	Detection Channel	F1	F2	F3	F4
	Applicable Dye	FAM, SYBR Green I	VIC, HEX, TET, JOE, Cy3	ROX, TEXAS RED, TAMRA	Cy5, Quasar 670
Block Temperature Range		4 to 105°C (Minimum division: 0.1 )			
Hot-Lid Temperature Range		70 to 110°C (adjustable, default- 105°C)			
Heating/Cooling Rate		4.0°C /s (max)			
Temperature Fluctuation		≤ ± 0.1°C (full-range), (55°C typical value ≤ ± 0.1°C)			
Temperature Accuracy		≤ ± 0.2°C (full-range), (55°C typical value ≤ ± 0.1°C)			
Temperature Uniformity		≤ ± 0.4°C (full-range), (55°C typical value ≤ ± 0.3°C)			
Temperature Range Of Hot-Lid Working		70 to 110°C (adjustable, default 105°C)			
Repeatability Of Fluorescent Intensity Detection		5%			
Programs		Absolute Quantification, Relative Quantification, SNP Analysis, Melting Curve Genotyping, Gradient, HRM, Multi-channel Crosstalk Correction, Background Correction, Automatic Gain, Customized Parameters.			
Ambient Working Conditions		Environmental temperature: 10°C to 30			
		Environmental RH: ≤ 70%			
		Altitude: < 2000 m			
Operation System		Windows XP/Windows Vista/Windows7/Windows8			
Device Requirements		Surface Pro series, PC, laptop			
Socket		RS232, USB, Bluetooth			
Power Supply		100-240V, 50/60 Hz, 600W			
Dimension		384 × 353 × 348 mm			
Weight		12 kg			