

THICKNESS MONITOR UNIT

Digital Thickness Monitor will be used to monitor the thickness of the thin film during evaporation / sputtering / coating

It consists of the following main items

- ❖ Digital Thickness Monitor
- ❖ Oscillator Box
- ❖ Cable to connect DTM to Oscillator Box
- ❖ BNC Cable to connect Oscillator Box to Feedthrough
- ❖ Mains Cable
- ❖ Water cooled Quartz Crystal Holder with Feed through

**# 16 /1, D. No. 4 , 2nd Floor, 1st Main, Teachers Layout, Opp. Rhiza Academy,
Vidyaranyapura, Bangalore – 560 097, KARNATAKA , INDIA**

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Website : www.kmvvacuum.com

DIGITAL THICKNESS MONITOR

Measurement	Transducer limited typically 5,000 $\mu\text{g}/\text{cm}^2$ as much as 20,000 $\mu\text{g}/\text{cm}^2$
Rate Display	3 digit LED Auto Ranging 0.00 to 999 $\text{\AA}/\text{Sec}$
Thickness Display	4 digit LED Auto Ranging 0.000 to 999.9 K \AA
Update Rate	Automatically varied to 4 to 5 update / sec
Static Thickness Rate	1 \AA @ Minimum update resolution
Input Parameter Acoustic	Tooling factor, density and acoustic impedance readout directly in angstrom
Film No. Parameters	Allows input for upto 100 films
Tooling Factor	1.0 to 999.9%
Film Density	0.800 to 99.99 gm/cm^3
Film Acoustic Impedance	5.000 to 99.99 x 10 $\text{gm}/\text{cm}\text{-sec}$
Shutter Control	Dedicated Relay Internal 3 Amp fuse protection two relays
Thickness Set Point	0.000 to 999.9 K \AA shutter closes when displayed thickness equals or exceeds set point
Start Control	Zero Thickness and Opens Shutter
Stop Control	Close Shutter
Shutter Position Indicator	LED On indicates shutter relay is activated
Crystal Compatibility	6 MHz
Crystal Test and Display	Type of Crystal being used
Crystal Health Analogue	Percentage of Crystal life remaining
Output	0 to +5 ± 0.25 V full scale corresponding to last 2 or 3 digits of selected display
Output Control	Rate of thickness select. Decade selects for conversion of last 2 or 3 digits
Self Test	Automatic Detection and Indication of Oscillator failure, power failure, power line failure and internal failure (thickness monitor)
Power Requirement	230 V AC $\pm 10\%$; 50 Hz
Approximate Size in mm	220 (W) X 230 (Depth) x 93 (H)
Operating Temperature	0 to 45 ⁰ C

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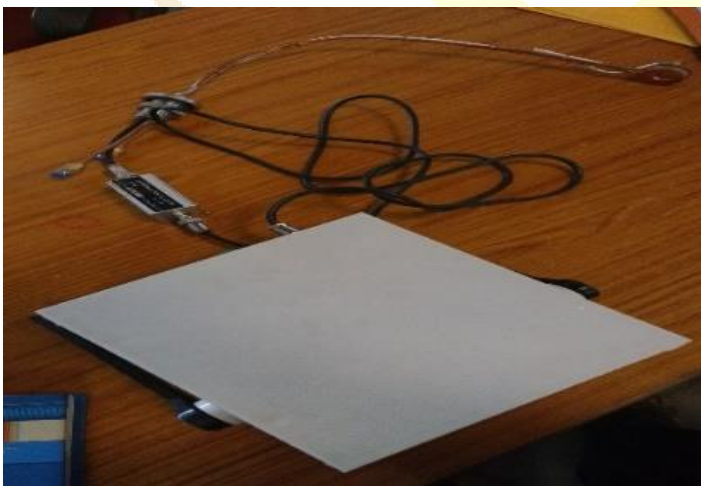
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Digital Thickness Monitor



Water Cooled Crystal Holder with Feedthrough and BNC Cable



Digital Thickness Monitor with Oscillator Box, Cables and Crystal Holder

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Imported – DTM With Accessories



Quartz Crystal Thickness Monitor



Quartz Crystal Sensor



Quartz Crystal Deposition Controller



Oscillator Box with Cables and Feedthrough

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