WEIBER®

# Micro processor Based HOT AIR OVEN

## Microcontroller Nano Watt Technology


Models:
Acm-22066-I

ACMAS TECHNOCRACY PVT. LTD.

Models:

- Acm-22066-I

WEIBER®

# Micro processor Based HOT AIR OVEN

Micro processor Based HOT AIR OVEN

WEIBER®


**Introduction :**

Weiber ovens provide uniform temperatures throughout. Process applications for laboratory ovens can be for annealing, die-bond curing, drying, Polyimide baking, sterilizing, and other industrial laboratory functions.

**CONSTRUCTION DETAILS:**

**Material Of Construction:**

Our Weiber Hot air ovens are double walled with inner chamber of Stainless steel sheet of grade SS 304 and outer wall of heavy gauge PCRC steel. sheet duly degreased and pre treated with primers for rust proofing duly painted with attractive stove enamel or powder coated .

**Temperature Range**

50 Degree C to 250 degree C

**Temperature Control**

The temperature inside the chamber is controlled by intelligent programmable temperature controller and indicator. This controller is based on the microcontroller nano watt technology and its ergonomic design suits for any specific requirement of the hot air oven, like Data logger facility, Thermal and DOT Matrix interface, direct data load facility in computer office automation software like MS-Word and Excel and many other features listed in the specification bellow.

**Interative ergonomic Control Unit based on Mocrocontroller**




ACMAS TECHNOCRACY PVT. LTD.
www.measuring-meters.com | www.acmasindia.com | www.scientificlaboratoryequipments.com

WEIBER®

# Micro processor Based HOT AIR OVEN

WEIBER®

# Microcontroller Nano Watt Technology

1) **Heater Mode :** This LED indicates the heating system on condition and it light up when the set temperature is higher than the ambient temperature.

3) **Temperature Alarm:** This LED indicated the extreme Ambient condition and the temperature failure condition.

4) **Audio Alarm :** This Alarm indicates the visual alarm and indiactes any failure and Temperature overshoot conditions.

5) **Door Open :** Visual indication with door open conditions.

6) **A.C Power failure :** This visual indicator light up when the mains power fail and the system working in the battery mode.

7) **Low battery indicator :** This LED indicates the battery backup status, This LED indicates when the battery charge capacity available at 25% of the total charge.

8) **UP :** Count up key.

9) **SET :** This is a set button to set any parameter on the screen, by pressing of this key a cursor blink on the corresponding parameter, So you can select any desired parameter and use UP and Down key to set specific value/setting.

10) **Down :** Down count key.

11) **ESC :** This key is used to exit from any menu, you are working right now.

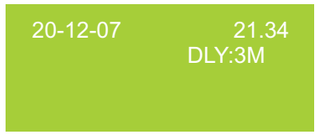
12) **Print/Data download :** This key is used to transfer the stored data into the printer or Data download facility in the computer MS Excel/Word and Hyperterminal software.

13 ) **Display Unit :** This unit is a user intertractive interface system for easy operation and it displays the parameter like DATE, TIME, Ambient Temperature, Compressor ON Delay Time, Read and Set Temperature.

14) **Temperature Display :** This seven segment display indicates the read temperature value inside the chamber.

**SYSTEM SETTING**

1) **DATE and TIME :** From normal operational mode, press SET key ones,




**The cursor blinks at**

DATE (20), and for second press of KEY SET the cursor blinks at MONTH ( 12 ), and similary on Third press of key SET cursor blinks at YEAR and repeat the steps to move to any parameter.
Similary you move cursor on any parameter and set desired value for system operation.,

To increase any parameter use UP key and to decrease any parameter use DOWN key.

After completion of all correct setting press ESC key to return back to the main menu.

**Optional Features :** (Can Be incorporated At Extra Cost If Desired)

LXVII. Temperature set point controls relays for refrigeration compressor and evaporator fan

LXVIII. Relays rated min. 200VAC:

a. Compressor: min. 8 A, min. 60 LRA
b. Fan: min. 4 A
c. B) High/low temp alarm

LXIX. Audio and Visual Alarm. Programmable
LXX. Alarm mute w/ ring back in 5 minutes

LXXI. Touch Button Control for Alarm Mute/Ring Back.

LXXII. Keyed alarm silence switch

LXXIII. External Keyed Alarm Mute. Alternate: Supervisor programmable code

LXXIV. Door Buzzer alarm

LXXV. IR Sensor/ Micro Switch Based Door open Alarm. Adjustable or fixed 30s delay before alarm

LXXVI. Power failure alarm: Automatic Power detection and Audio Visual Alarm. Adjustable or fixed 15 min delay before alarm

LXXVII. Programmable temp range: Touch Button Control to Program Temperature. User Settable.



ACMAS TECHNOCRACY PVT. LTD.
www.measuring-meters.com | www.acmasindia.com | www.scientificlaboratoryequipments.com

# Micro processor Based HOT AIR OVEN

LXXVIII. Battery backup: Automatic Battery Charging Facility inbuilt in circuit. Provides up to 24 hr of display power

LXXIX. Mounted temp probe

LXXX. Dual PT-100 sensor With Ambient Sensing by Semi conductor Temperature Sensor. Set point display (program mode) LCD and Segment

LXXXI. Dry contacts( Remote Control ) for central alarming.

LXXXII. R.F based Remote Alarm System

LXXXIII. Built-in chart recorder/Thermal Printer standard for blood bank units or data acquisition in the controller memory which can be down loaded on a computer through a suitable world standard interface like RS232 and/or Rs485.

LXXXIV. RS-232 I/O Port Provided,

LXXXV. Serial Thermal Printing facility.

LXXXVI. 24 hr non-volatile temperature Record Storage Capacity, and Record Download facility in MS WORD/Hyper terminal / MS-Excel.

LXXXVII. Up to 1 MB data storage Facility.

LXXXVIII. Seven Day Profile Timer with Real Time Clock.

**Insulation**

The gap of 75 mm between the outer and the inner wall is filled with special grade glass wool to prevent thermal losses. Mineral Glass Wool Insulation: Glass mineral wool is one of the most environmentally friendly, stable and sustainable insulants available. Glass wool is incombustible by nature. Euro class classification is A. It does not propagate flames and toxic smokes. Thanks to a dense entanglement of materials with a low conduction and trapping a great amount of air, glass wool is a an excellent thermal insulant. The thickest it is, the best thermal resistance it has, thus reducing heat losses in our equipments for better sensitivity and economical operations. And its impact on the environment in manufacture, use and disposal is minimal.

**Air circulation**

Triple walled back of unit is fitted with two air circulation fans for maintaining temperature uniformly throughout the chamber

**Features of Coaxial Circulation Fan:**

- Vacuum impregnated starter.
- non-hygroscopic.
- Best IR value
- Bright bar (EN - 8 classes) shaft.
- Bush bearing of branded companies.



WEIBER®

# Microcontroller Nano Watt Technology

- Surge comparison testing in fans and pumps eliminates into turn short circulating of the stator.
- Pressure die-casted-rotor manufactured with zero error.
- Boats of high accuracy

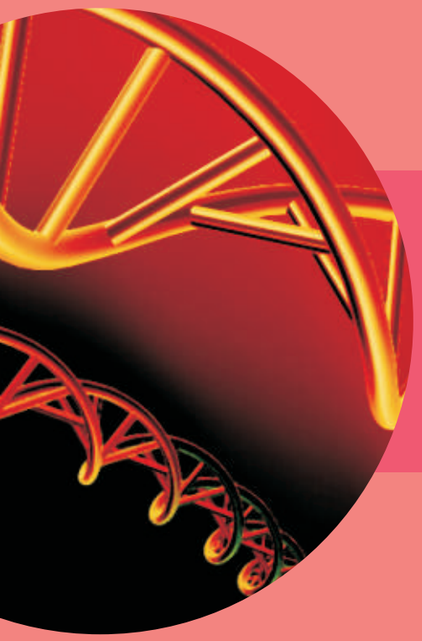
**Front Panel**

The front panel is provided with separate indicator lamps for main heating and incoming voltage. Digital Temperature controller cum Indicator and voltmeter.

**Shelves:**

The unit is supplied with one/two three shelves(Model Specifiic) of stainless steel sheet.

ACMAS TECHNOCRACY PVT. LTD.
www.measuring-meters.com | www.acmasindia.com | www.scientificlaboratoryequipments.com



WEIBER®

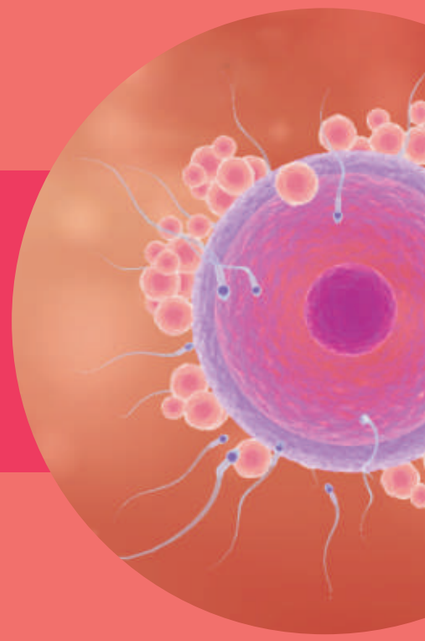
# Micro processor Based HOT AIR OVEN

| TECHNICAL MATRIX | | |
|---|---|---|
| Temperature Control | | |
| Temperature variation (time) | +/- °C | 0.5 |
| Temperature deviation (spatial) | +/- °C | 0.5 |
| Readability/ Set ability | °C | 0.5 |
| Temperature range *** | °C | 50°C to 250°C |
| Sensor thermocouple | | Type K |
| Controller | | Nano technology based |
| | | ergonomic controller |
| Display | | LCD |
| Adjustable alarm limits | | Optional |
| (visual and acoustic) | | |
| Safety thermostats | | |
| Temperature variation (time) | +/-°C | 3 |
| Sensor thermocouple | | Type K |
| Automatic setting | | Yes |
| Adjustable limits | | Yes |
| Accessories | | |
| Real Time Program | | optional |
| Printer Report Program | | Incorporated |
| Serieal Data Port | RS232 | Incorporated |
| Inspection window in door | | optional |
| Shelves | | |



WEIBER®

# Microcontroller Nano Watt Technology



| | | |
|---|---|---|
| Standard/ max | | 1-2- 3 (depending on the |
| | | internal size |
| Dimensions w,d | mm | As per the individual model |
| Max load per shelf | kg | 20 |
| Permitted total load | kg | 60 kg (Max Internal Size) |
| Accessories | | |
| Printer Report Program | | Incorporated |
| 2 x 24 characters LCD Display | | optional |
| Access Port 30 mm | | optional |
| Inspection window in door with cover | | optional |
| Castors, lockable | | optional |
| Power consumption | | |
| Nominal power | W | 1250 -2500 |
| Nominal voltage | V | 230, 1~ |
| Frequency | Hz | 50/60 |

ACMAS TECHNOCRACY PVT. LTD.
www.measuring-meters.com | www.acmasindia.com | www.scientificlaboratoryequipments.com

We are having **Representatives in 55 Countries**

please visit our

**International  Dealers Section**

to contact your nearest **ACMAS** Representative

# TECHNOLOGY with HUMAN TOUCH

CE | **An ISO 9001:2208 | ISO 14001:2008 | ISO 13485**
**WHO:GMP Products | GLP Compliant Products**

www.acmasindia.com | www.scientificlaboratoryequipments.com | www.measuring-meters.com


**ACMAS TECHNOCRACY PVT. LTD.**

**SALES OFFICE (INDIA)**

312-313, Vardhman Capital Mall, L.S.C. 10, GulabiBagh, Delhi-110052, INDIA

Tel: 0091-11-23646703, 23643054

(M) +91-9313971681| Email: india@acmasindia.com

**SALES OFFICE (HONG KONG)**

Unit D 28 11/f Wing Tat Comm, Bldg 97, Bonham Strand East, Sheung Wan, HONG KONG (PRC).

Tel: 0086-13929598046 | 0086-18922303099

Email: hk@acmasindia.com

**SHOWROOM**

141, Rai Industrial Estate, Rai, Sonepat, Haryana-131029, INDIA

Tel: 0091-0-9312219738 (M) +91-9717741167

Email: info@acmasindia.com

**SALES OFFICE (RUSSIA)**

Inmed Trade Street, Ozerkovsky Embankment, Unit No 50 Straine-1, Off-502, Moscow, RUSSIA

Tel: 0049-79592345 | Email: russia@acmasindia.com