

# Intelligent Solutions in Ink-Jet Printing



Manufacturer:

**macart**  
equipment pvt. ltd.



## ABOUT US

**MACART EQUIPMENT PVT LTD. (MEPL)** is a professionally managed company established in 2000 by Mr. Atul Gandhi, having its headquarter in Pune, India and currently have 2 manufacturing units in Pune.

MEPL is the only InkJet equipment manufacturing company in India. We have modern R&D center in Pune where we design high quality inkjet printers for sign industry and other industrial applications. We have Sales Service network throughout India with more than fifty qualified engineers and now we are expanding our sales and service network all over the world. MEPL has supplied thousands of printers to various print houses, advt agencies and sign makers who have made huge profits using our equipments and have proved the capability and quality of our equipments.



**MEPL** with its primary focus on Digital Printing Equipment Development and Manufacturing is a conglomerate of the following 3 independent Strategic Business Units:

- Products Division
- Technology Services/Product development
- Trading

## PRODUCT DIVISION

This division is involved in manufacturing of large format solvent based printers and Industrial Coding and Marking Printers mainly based on Xaar Print heads from UK. MEPL is the leader in India in manufacturing and in sales. MEPL is the only company in India to develop complete electronics for the printer including the new powerful Star Raster Image Processor (RIP) software.

## TECHNOLOGY SERVICES / PRODUCT DEVELOPMENT

MEPL is involved in providing technology services mainly in the inkjet printing products and also for VLSI based applications. Macart has developed several products related to inkjet printing and is working on many new inkjet technologies. Our Research team is highly technically qualified and is ready to take very challenging Research and development work. We provide our OEM's with complete solutions for manufacturing of large format printers and other industrial inkjet printers.



New R&D Centre



VLSI Design Department





#### SOME OF THE CREDITABLE WORK BY OUR RESEARCH TEAM....

- One of the worlds most advance single board electronics based on VLSI (FPGA). This MB consists of 10 soft core processors running parallel (embedded in a single FPGA), having parallel processing power.
- The MB has in built motion control, led display & keyboard control, USB & Parallel communication controls, upto 16 XAAR head control, Memory buffers and many more.
- Advance Rip algorithm for inkjets, developed using C# .Net
- Worlds most compact solvent printer.
- India's first and only to develop edible InkJet printer to print on cakes and other edible food items.
- India's first and only to develop complete XY cutting plotter.
- MEPLS own Servo motor driver and stepper driver control board.



Mother Board



Head Carriage Board



Motor Driver Board

**TRADING** MEPL is into trading of Inks and Print heads and special media's.

#### MACART - ONE UP. ALWAYS!

Macart has always been the leader in developing new products and adding unique features to its products. Thanks to its R&D team. Our in-house designs for the mechanical assemblies, electronics and software for all our products make our products highly reliable and cost effective. We have supplied hundreds of printers and plotters to the leading design industries who have highly benefitted using our value-for-money products.





# PICOMAX

## Series

### KM 1024 / 512i / 512

## Solvent / Flex Printer



### PICOMAX - Pro Features:

1. Very High speed & High Quality Printing with advanced Macart electronics and Macart's Star RIP software.
- ★ 2. Heavy and Rugged structure.
- ★ 3. Low noise linear bearing with new advanced caged bearing blocks.
4. Powerful AC servo motor for high speed carriage motion.
- ★ 5. DC servo for Media motion.
6. Powerful media griper for precise media displacement,
7. Controlled media suction for accurate printing.
- ★ 8. Three zone media heating- Pre, Post and print bed with PID controller.
9. Two fan channels for faster drying of print.
- ★ 10. Auto head capping.
11. Dual control panel – software and printer.
12. LED light illuminated printing area.
13. Enhanced colors by advance Rip software.
14. Ink fume exhaust.
- ★ 15. Easy media roll loading from bottom.
- ★ 16. Media releaser for sticky media.
- ★ 17. Two separate roll feeds for loading two different media's of different sizes or types at one time.
- ★ 18. Media front take up winder.
- ★ 19. Optional monitor tray.
20. Gravity ink feeding.
21. Teflon ink tubing for life upto 20 years & long head life.
22. Hard aluminum alloy timing pulleys for long life.
23. German belts.
24. Macart manufactured cable drag chain for smooth and long life.
25. Extremely low power consumption.
26. Power failure printing continuation function.
27. Many ICC color profiles available for various media's.
28. Solvent resistant paint.
29. Compact body.
30. More than 70% Aluminum body for very long life.
31. Made in India Electronics, easy to maintain and repair.
- ★ 32. IR front heating for fast drying of inks for vinyls and glossy media's ( Optional )

### Specifications:

- Resolution: Maximum 1440
- Colour: Maximum 16.7 million colours
- Speed: KM512i 8head - 4800 sqft/hr in 1 pass, 2400 sqft/hr in 2 pass.
- KM512i 4head - 2400 sqft/hr in 1 pass, 1200 sqft/hr in 2 pass.
- KM512 4 head - 900 sqft/hr in 1 pass, 450 sqft/hr in 2 pass.
- KM1024 4 head 2000 sqft/hr in 1 pass, 1000 sqft/hr in 2 pass.
- Rip: Star Rip Image Processor mfg. by Macart
- Media width - 130" / 78"
- Print Width - 125" / 72"
- Media Type: Flex, Backlit flex, vinyl, clear vinyl, canvas
- Ink: Pigment based solvent ink
- Interface: USB 2.0
- Power Requirement: 250 VAC, 50Hz single phase
- Power consumption: Max – 450 W
- Machine heater - 900W & 1000 W for IR heater.



## Solvent / Flex Printer



### PICOMAX Features:

1. Very High speed & High Quality Printing with advanced Macart electronics and Macart's Star RIP software.
2. Heavy and Rugged structure.
3. Low noise linear bearing.
4. Powerful AC servo motor for high speed carriage motion.
5. Powerful media griper for precise media displacement,
6. Controlled media suction for accurate printing.
7. Two zone media heating- Pre and Post
8. Two fan channels for faster drying of print.
9. Auto head capping.
10. Dual control panel – software and printer.
11. LED light illuminated printing area.
12. Enhanced colours by advance Rip software.
13. Easy media roll loading from bottom.
14. Swing bar type Media releaser for sticky media.
15. Gravity ink feeding.
16. Teflon ink tubing for life upto 20 yrs & long head life.
17. Hard aluminum alloy timing pulleys for long life.
18. German belts.
19. Macart manufactured cable drag chain for smooth and long life.
20. Extremely low power consumption.
21. Power failure printing continuation function.
22. Many ICC colour profiles available for various media's.
23. Solvent resistant paint.
24. Compact body.
25. More than 70% Aluminum body for very long life.
26. Made in India Electronics, easy to maintain and repair.

### Quality Parts :



Opti Belt Germany



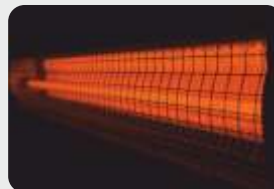
Teflon Tubing



Aluminum Alloy Timing Pulleys



New THK Japan  
linear caged bearing



Infrared Heater



Macart Cable Drag chain with  
Separate Tube & cable Path

# THE NEW PICOJET- Series

## KM1024/512i/512

Solvent / Flex Printer



### PICOJET PRO Features:

1. Very High speed & High Quality Printing with advanced Macart electronics and Macart's Star RIP software.
- ★ 2. Low noise linear bearing with new advanced caged bearing blocks.
- ★ 3. Powerful AC servo motor for high speed carriage motion.
- ★ 4. DC servo for Media motion.
5. Powerful media griper for precise media displacement,
6. Controlled media suction for accurate printing.
7. Two zone media heating- Pre & Post.
8. Two fan channels for faster drying of print (for Km512i & 1024 only)
9. Dual control panel – software and printer.
10. LED light illuminated printing area.
11. Enhanced colors by advance Rip software.
12. Easy media roll loading from bottom.
13. Swing bar type Media releaser for sticky media.
14. Gravity ink feeding.
15. Teflon ink tubing for life upto 20 yrs & long head life.
16. Hard aluminum alloy timing pulleys for long life.
17. German belts.
18. Macart manufactured cable drag chain for smooth and long life.
19. Extremely low power consumption.
20. Power failure printing continuation function.
21. Many ICC color profiles available for various media's.
22. Solvent resistant paint.
23. Very Compact body.

24. More than 70% Aluminum body for very long life.
25. Made in India Electronics, easy to maintain and repair.

### Specifications:

- Printing Technology: Piezo Drop on Demand Electric Inkjet, 4 color of Cyan, Magenta, Yellow & Black
- Resolution: Maximum 1440
- Colors: Maximum 16.7 million colors
- Speed: KM512i 8head - 4800 sqft/hr in 1 pass, 2400 sqft/hr in 2 pass.
- KM512i 4 head - 2400 sqft/hr in 1 pass, 1200 sqft/hr in 2 pass.
- KM512 4 head - 900 sqft/hr in 1 pass, 450 sqft/hr in 2 pass.
- KM1024 4 head 2000 sqft/hr in 1 pass, 1000 sqft/hr in 2 pass.
- Software: Star Rip Image Processor
- Media width - 130" / 78"
- Print Width - 125" / 72"
- Media Type: Flex, Backlit Flex, Vinyl, Clear Vinyl, Canvas
- Ink: Pigment based Solvent Inks
- Interface: USB 2.0
- Power Requirement: 250 VAC, 50 Hz, single phase
- Power Consumption: Max 350 W
- Machine heater - Max 600 W
- Laptop Tray: Optional



## Solvent / Flex Printer



### PICO IMPACT Features:

1. Very High speed & High Quality Printing with advanced Macart electronics and Macart's Star RIP software.
2. Low noise linear bearing.
3. Powerful AC servo motor for high speed carriage motion.
4. Powerful media gripper for precise media displacement,
5. Controlled media suction for accurate printing.
6. Two zone media heating- Pre & Post.
7. Two fan channels for faster drying of print (for Km512i & 1024 only)
8. Dual control panel – software and printer.
9. LED light illuminated printing area.
10. Enhanced colors by advance Rip software.
11. Easy media roll loading from bottom.
12. Swing bar type Media releaser for sticky media.
13. Gravity ink feeding.
14. Teflon ink tubing for life upto 20 yrs & long head life.
15. Hard aluminum alloy timing pulleys for long life.
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20. Many ICC color profiles available for various media's.
21. Solvent resistant paint.
22. Very Compact body.

23. More than 70% Aluminum body for very long life.
24. Made in India Electronics, easy to maintain and repair.

### Quality Parts:



Heavy Duty Carriage



More Pinch Rollers



High Quality Media Gripper



New Air Drying System



New Y Timing Pulleys



New X Timing Pulleys

Manufacturer:

**macart**  
equipment pvt. ltd.

[www.macartworld.com](http://www.macartworld.com)



KM 1024 - head



KM 512i - head



KM 512 - head,



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