# 4020

# Drop-on-demand coders



# Markem-Imaje commitment: a simple and flexible solution delivering high print quality

The 4020's patented and proven drop-on-demand valvejet technology allows for both impeccable coding and easy integration onto all manufacturing lines. Characterized by its compact size, the 4020 is ideal, from one side to multi-side case coding up to three shifts. Already well-known for its simplicity and flexibility, the 4020, with its new generation 'Ink Efficient Printhead', offers lower ink consumption.

## Flexibility across time

- Up to 4 printheads per controller, 7 or 16 nozzle printheads in any combination.
- Print heights from 8 mm to 64 mm.
- Standard Ethernet connection, 2 high speed RS232 communication ports and optional digital I/O box for easy integration.
- CoLOS software solutions ensure product data integrity, central data management and easy connection to existing Enterprise database.



# **Operation optimization**

- Large graphic display with print preview, intuitive interface in local language.
- 4.5 L containers as standard. Large ink containers up to 30 L available for even higher uptime.
- Low ink alert enables operator to anticipate barrel replacement.





# **High-performance printing**

- Constant, excellent print quality at up to 20 mm marking distance.
- Print speeds up to 90 m/min.
- Choice of black and color inks for both porous and non-porous substrates: cardboard, coated cardboard, plastic, glass, metal, PVC, wood, concrete...



## **Cost reduction**

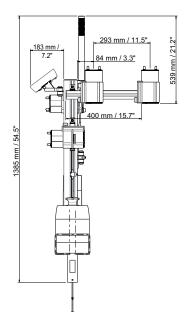
- The new 'Ink Efficient Printhead' with its enhanced drop control optimizes ink consumption.
- The new ink system ensures ink barrel is fully emptied.





#### Print features

- Up to 4 printheads per controller
- 7-nozzle printhead: 1 line of text 16-nozzle printhead: 1 or 2 lines of text
- Print height: 8 mm to 64 mm
- Prints alphanumeric text including: time, date, 2 expiration dates, shift code, 3 counters (automatic numbering), user prompt, external variables and bitmap files
- Prints more than 22,000 Unicode characters (Arabic, Cyrillic, Chinese, Greek, Hebrew, Kanji, Katakana and Latin)
- Message length up to 5,000 characters
- · Character width can be adjusted
- · Adjustable print delay for message placement
- Print positioning on cases includes: top, side, opposite side and bottom
- Up to 20 mm throw-distance between printhead and substrate
- · Standard or upside down printing, bi-directional printing; both from the right and left
- Print speeds up to 90 m/min



#### Operations

- Single button printer activation and deactivation
- · Intuitive operator interface; icons with help text
- Graphic 240 x 64 pixel backlit display
- Interface available in 28 languages: Arabic, Brazilian, Bulgarian, Chinese (simplified), Chinese (traditional), Croatian, Czech, Danish, Dutch, English, Farsi, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Norwegian, Polish, Portuguese, Romanian, Russian, Slovenian, Spanish, Swedish, Turkish
- Storage capacity: up to 800 messages (may vary depending on message size)
- Integrated help file for easy user navigation and operation
- · Automatic printhead detection with hotswap functionality
- Status indicator LEDs
- · Availability of inks include: water-based (porous), alcohol-based (semi-porous) and ethyl acetate-based (non-porous)
- Inks are available in black, blue and red
- Pressurized ink system; 4.5 L, 5 L, 18.9 L and 30 L barrels
- 2 RS-232 communication ports, COM1 RJ45 and COM2 9 pin D-sub, up to 115,200 baud
- LAN (Ethernet), RJ45, 10/100 Mbps
- FTP server for easy back-up and file transfer

673 mm / 26.5" 360 - 587 mm / 14.2 - 23.1" (Depending on printhead position)

#### Other characteristics

- Weight:
- Controller: 1.19 kg
- 7-nozzle printhead: 0.46 kg
- 16-nozzle printhead: 0.89 kg
- · Support beam with cable slot
- Operating temperature range: 5° to 40°C
- Humidity: 20% to 90%, non-condensing
- Electrical power supply:
- 1 or 2 head systems: input 100-240 V AC, 50-60 Hz, 1.9 A; output 24 V DC, 3 A
- 3 or 4 head systems: 100-240 V AC, 50-60 Hz, 3 A; output 24 V DC, 5 A

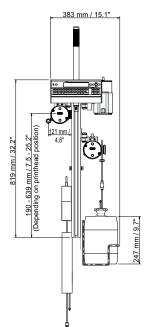
#### Accessories

- Status beacon
- · Extension arm for long-reach printhead mounting and top/bottom printing
- Photo sensor (standard or reflective)
- · Air pump kit
- · Regulator for compressed air
- · Pulse encoder

#### PC software

#### Compatible with:

- CoLOS Create Professional
- CoLOS Enterprise



### To learn more, visit www.markem-imaje.com



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03 mm / 15.9

We reserve the right to amend the design and/or specifications of our products without notice

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