



# iData DM5000 High-performance Fixed Mount Scanner

Large field of view & wide depth of field, designed to improve on-site data-collecting efficiency of automatic production line

iData DM5000 has a large field of view and a wide depth of field. It can read multiple barcodes at the same time. With different lens options, DM5000 has a wider range of reading distances so that it can be applied to almost any production line, such as semiconductor manufacturing, automobile manufacturing, mobile phone manufacturing, etc. In all, DM5000 can improve on-site data-collecting efficiency in automatic production lines effectively with its capacity to scan codes for traceability or to print codes for verification.

## Ultra-large FOV, support simultaneous multiple barcodes reading

Adopting a 20MP image sensor, it can support reading 200 QR codes at the same time, and can quickly complete a large number of recording tasks. With the coding rating function, it can quickly authenticate the coding results to ensure the quality of the barcode.

## Wider DOF to fit more production lines

Equipped with a 6MP image sensor, the reading range is 60mm~800mm, covering almost any scene. It can be used for scanning codes and traceability of micro components and large components. It comes with a mechanical focusing lens to complete the focus automatically and facilitate debugging process.

## Industrial IP protection to survive more complicated operations

With IP67 protection capability, it is suitable for all kinds of dust workshops, cold and hot processing workshops, cleaning workshops and other on-site operating environments, the risk of equipment shutdown caused by harsh environments has been reduced effectively.



Semiconductor manufacturing



Automobile manufacturing



Smartphone 3C Manufacturing



Photovoltaic manufacturing

# DM5000 Technical Specifications

## Hardware Parameters

|                      |                                                                             |                         |
|----------------------|-----------------------------------------------------------------------------|-------------------------|
| Model                | DM5000-60P                                                                  | DM5000-200P             |
| Resolution           | 3072×2048 ppi                                                               | 5440 × 3648ppi          |
| Camera               | Mechanical focus                                                            | C port                  |
| Full-in Light        | White light, optional red/blue light/infrared light                         | No light source withine |
| Indicator on Housing | Power indicator: PWR<br>Network indicator: LNK/ACT<br>User indicator: U1/U2 |                         |

## Structural Parameters

|                        |                                                         |                      |
|------------------------|---------------------------------------------------------|----------------------|
| Size (LxWxD)           | 118.7mm×78mm×73.2mm                                     | 109.5mm×64.4mm×109mm |
| Weight                 | Est. 520g                                               | Est. 470g            |
| Screw Holes on Housing | Screw hole size: M4<br>Back and Front-end: 4 holes/each |                      |

## Scan Performance

|               |                                                                                                                                                                                    |            |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Scan Rate     | 90 codes/s                                                                                                                                                                         | 36 codes/s |
| Frame Rate    | 30 FPS                                                                                                                                                                             | 20 FPS     |
| Capture range | 60mm~800mm                                                                                                                                                                         | 80mm~600mm |
| Code system   | One dimension:<br>Code 39, Code 93, Code 128, CodaBar, EAN8, EAN13, UPCA, UPCE, ITF14, ITF25, Matrix 25, MSI, China Post, Code 11 ,etc.<br>Two dimensions:<br>QR, DM, PDF417, etc. |            |

## Certifications

|                |               |
|----------------|---------------|
| Certifications | CE, FCC, RoHS |
|----------------|---------------|

## Electrical Parameters

|                |                                                                                                                                                                                      |                                       |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Max. Output    | 20W 24V DC<br>(Fill-in light is on)                                                                                                                                                  | 47.5W 24V DC<br>(Fill-in light is on) |
| Voltage        | 24V DC                                                                                                                                                                               | 12V DC ~ 24V DC                       |
| Digital I/O    | 12-pin M12 connector provides power and I/O: including 3 optocoupler isolated inputs (LineIn 0/1/2), 3 optocoupler isolated outputs (LineOut 0/1/2), 1 RS-232 input, 1 RS-232 output |                                       |
| Data Interface | Gigabit Ethernet (1000 Mbit/s)                                                                                                                                                       |                                       |

## Environmental Parameters

|                     |                                             |
|---------------------|---------------------------------------------|
| Working Temperature | 0°C ~ 50°C                                  |
| Storage Temperature | -30°C ~ 70°C                                |
| Humidity            | 20% ~ 95%RH (no condensation)               |
| IP Rating           | IP67 (with waterproof lens cover installed) |
| Ambient Light       | 0~100000Lux                                 |

## Communication Protocol

|          |                                                                                                  |
|----------|--------------------------------------------------------------------------------------------------|
| Protocol | SmartSDK, TCP Client, Serial, FTP, TCP Server, PROFINET, Ethernet/IP, MELSEC, Fins, ModBus, SLMP |
|----------|--------------------------------------------------------------------------------------------------|

## Accessories

|                      |                                                                                                                                                                                              |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Accessories | Power cord: M12 cable, M12 A Code/12P/F convert to OPEN, black, 5m;<br>Network cable: M12 cable, M12 A Code/8P/M convert to crystal head, black network port male head black, 5m;<br>Adapter |
| Optional Accessories | Installation panel                                                                                                                                                                           |

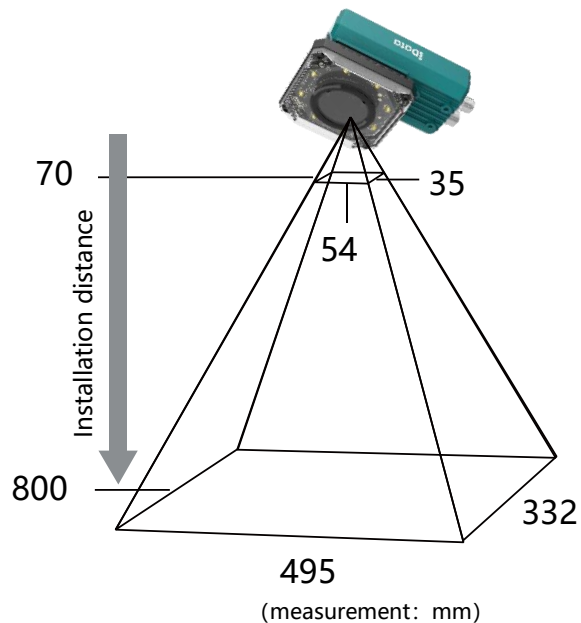
The information of iData products and software service may be subject to change without notice. Please contact your iData sales representative for the latest details.



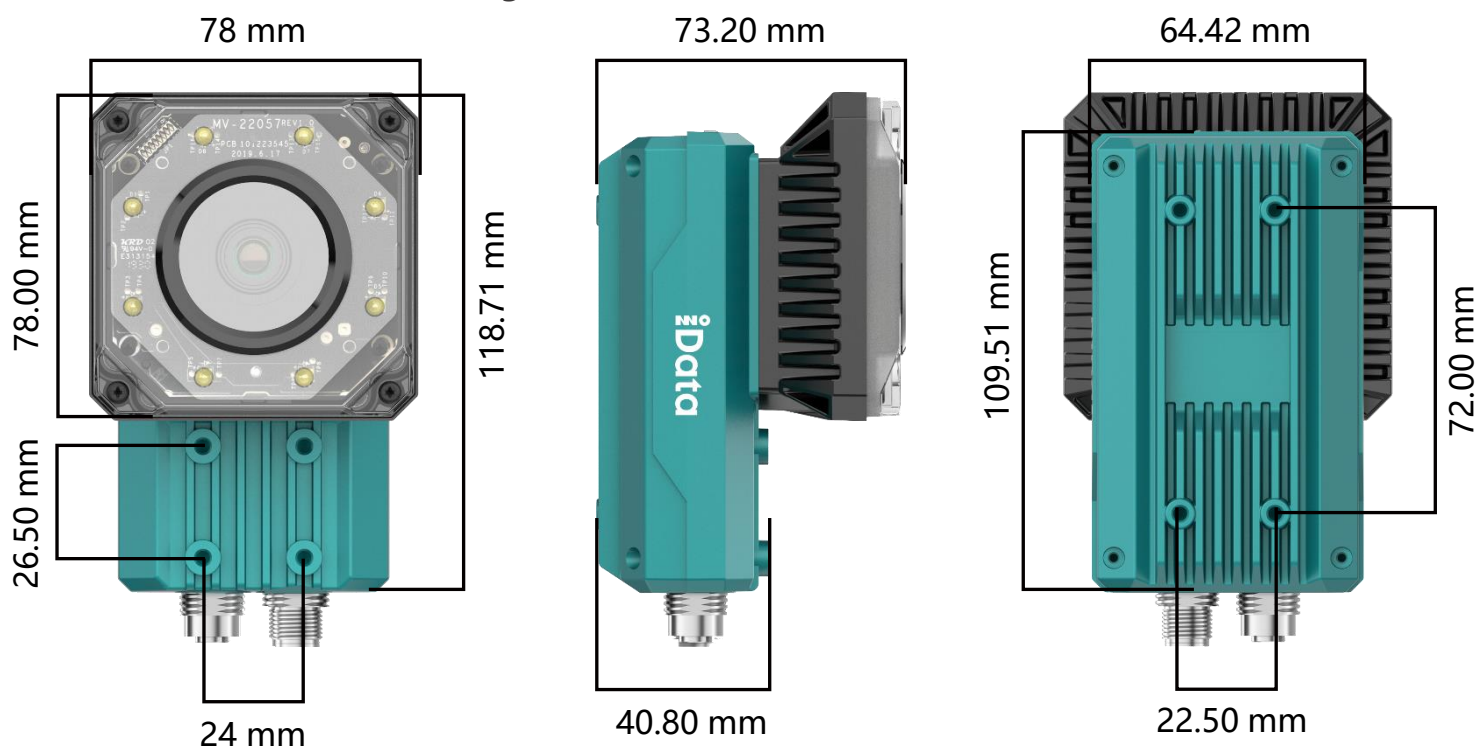
# DM5000 Technical Specifications

## DM5000-60P FOV, DOF and Min. Reading Accuracy

| Working distance (mm) | 3072×2048 pixel |               |                       |             |
|-----------------------|-----------------|---------------|-----------------------|-------------|
|                       | Field of view   |               | Min. reading accuracy |             |
|                       | Horizontal (mm) | Vertical (mm) | 2Dcode (mm)           | 1Dcode (mm) |
| 70                    | 54              | 35            | 0.070                 | 0.018       |
| 100                   | 72              | 48            | 0.094                 | 0.023       |
| 200                   | 131             | 85            | 0.171                 | 0.043       |
| 300                   | 194             | 127           | 0.253                 | 0.063       |
| 400                   | 250             | 165           | 0.326                 | 0.081       |
| 500                   | 316             | 210           | 0.411                 | 0.103       |
| 600                   | 374             | 244           | 0.487                 | 0.122       |
| 700                   | 432             | 290           | 0.563                 | 0.141       |
| 800                   | 495             | 332           | 0.645                 | 0.161       |



## DM5000-60P Structural Diagram



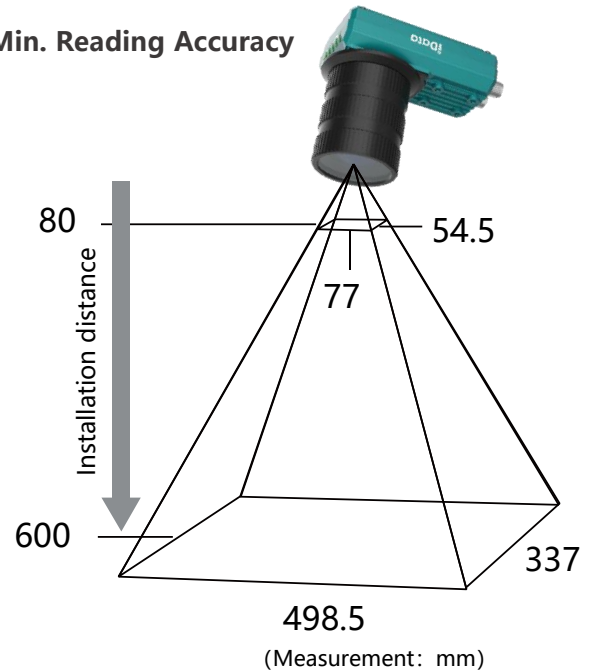
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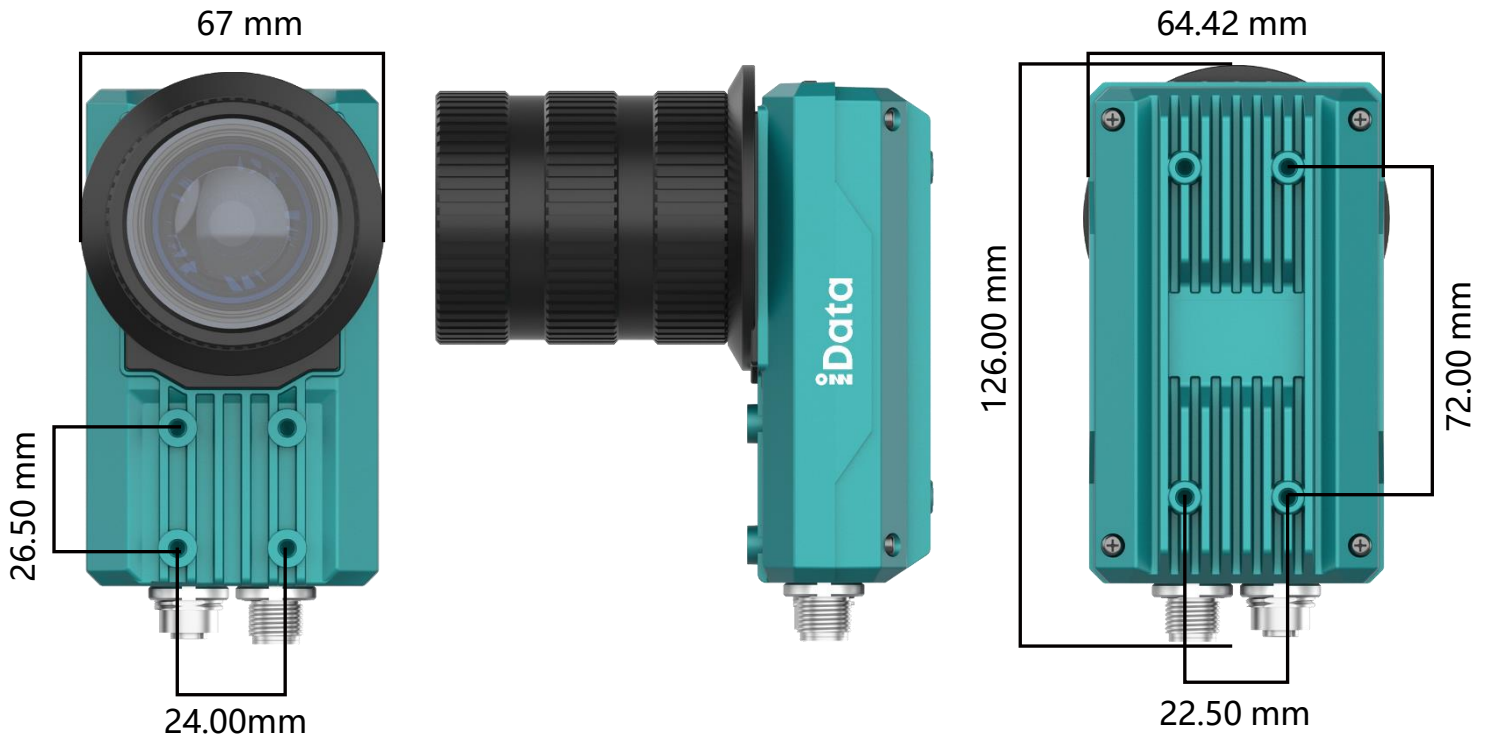
# DM5000 Technical Specifications

## DM5000-200P(C port 16mm focus lens) FOV, DOF and Min. Reading Accuracy

| Working distance (mm) | 5440×3648 pixel |               |                       |             |
|-----------------------|-----------------|---------------|-----------------------|-------------|
|                       | Field of view   |               | Min. reading accuracy |             |
|                       | Horizontal (mm) | Vertical (mm) | 2Dcode (mm)           | 1Dcode (mm) |
| 80                    | 77              | 54.5          | 0.057                 | 0.014       |
| 100                   | 100             | 62            | 0.074                 | 0.018       |
| 200                   | 179             | 130           | 0.132                 | 0.033       |
| 300                   | 259             | 177           | 0.190                 | 0.048       |
| 400                   | 335             | 231           | 0.246                 | 0.062       |
| 500                   | 426             | 287           | 0.313                 | 0.078       |
| 600                   | 498.5           | 337           | 0.367                 | 0.092       |



## DM5000-200P(C port 16mm focus lens) Structural Diagram



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