



DataMan[®] 300 Series

Extension Kit Installation Guide

2021 January 28

Laser Light Warning



WARNING: Do not stare into beam when adding, removing, or changing cables. Cognex recommends to unpower the reader any time you make physical changes to it.

Symbols

The following symbols indicate safety precautions and supplemental information:



WARNING: This symbol indicates a hazard that could cause death, serious personal injury or electrical shock.



CAUTION: This symbol indicates a hazard that could result in property damage.



Note: This symbol indicates additional information about a subject.

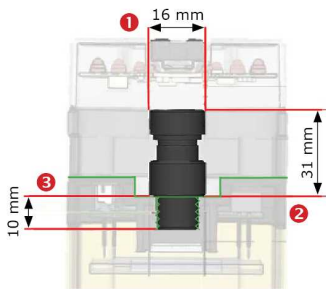


Tip: This symbol indicates suggestions and shortcuts that might not otherwise be apparent.

Dimensional Constraints

The DM300 extension kit has the following lens dimensional constraints, shown in this cross section view of a DM300 reader:

- 1: max. diameter of lens barrel/lens spacer = 16 mm
- 2: max. length of the lens relative to the mount face = 31 mm
- 3: max. thread extension for an M12 lens = 10 mm



About DataMan 300 Extension Kit

The DM300 extension kit allows the use of longer focal length S-Mount/M12 lenses and spacers.

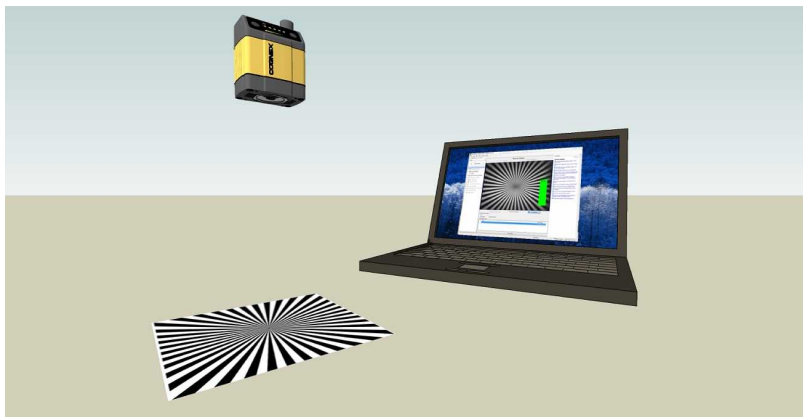
Insert the Lens

1. Disconnect the device from power and remove the lens cover, lens, and protective cap.
2. Insert the M12 lens and lens extenders (if appropriate).



Adjust Lens Focus

1. Place the reader at the desired working distance from focus target.
2. Power up the DM300.
3. Connect the reader to the Setup Tool.
4. In the **Optimize Image** pane's **Basic** tab, click the triangle on the **Live** button to access the drop-down list, and check the **Focus Feedback** option.
5. Use the *DataMan Focus Target* template, available through the Windows Start menu, to align the edge of the reader body to the line marked with the target distance used in your application.
6. Adjust focus for maximum sharpness. Enhance image quality in the Setup Tool for better guidance.
7. Ensure the locking of your M12 lens setup.
8. Verify focus for maximum sharpness.
9. Disconnect power from the DM300.



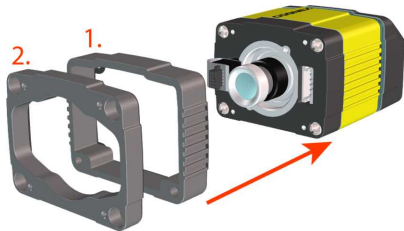
Add Extension Cable

Plug in the extension cable.



Add Housing Extensions

Attach housing extensions in the specified order and then tighten the screws.





Note: Tighten in sequence. Torque limit: 0.8 Nm (7 Lb-In).

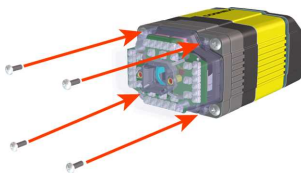


Mount Lens Cover

1. Mount the lens cover, making sure that the lighting connector on the cover connects to the extension cable connector.



2. Fix the lens cover.



Note: Tighten screws to 9 N-cm (0.8 Lb-In) in the order shown.



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