

How-to guide

How to check the readability
of linkIQ meters



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Contents


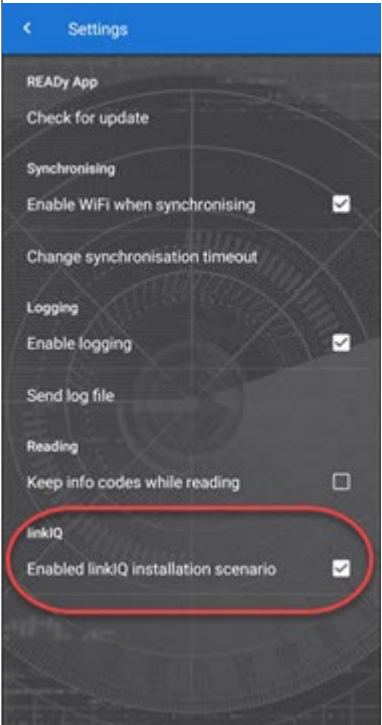
| | | |
|----|---|----|
| 1. | How to check the readability of linkIQ meters | 4 |
| 2. | Troubleshooting | 14 |


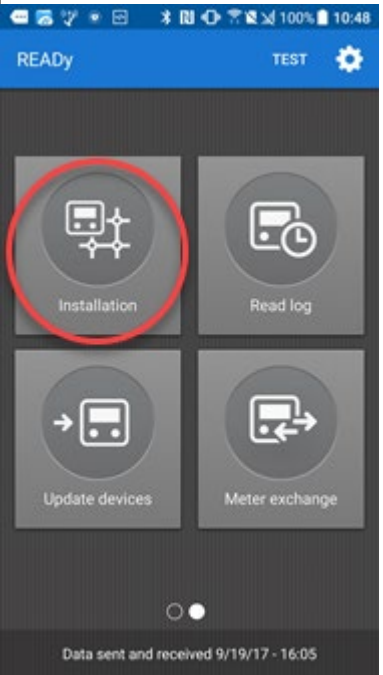

1. How to check the readability of linkIQ meters



For linkIQ meters (MULTICAL® 403/603/803 and flowIQ 2200/3100) read in a linkIQ network, you can check the readability of a meter installation before leaving the installation site.

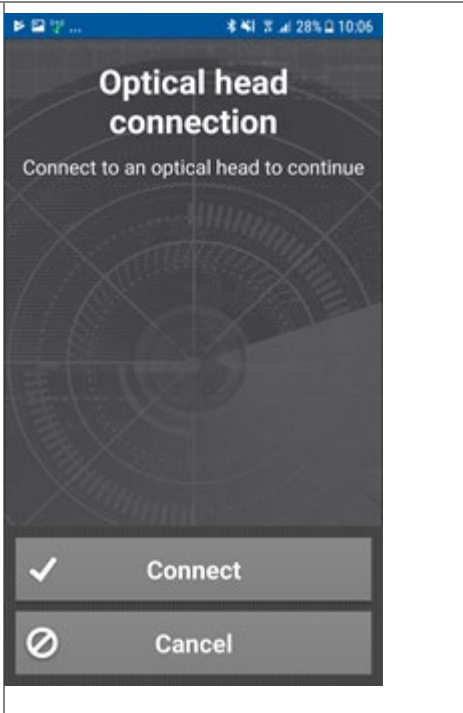
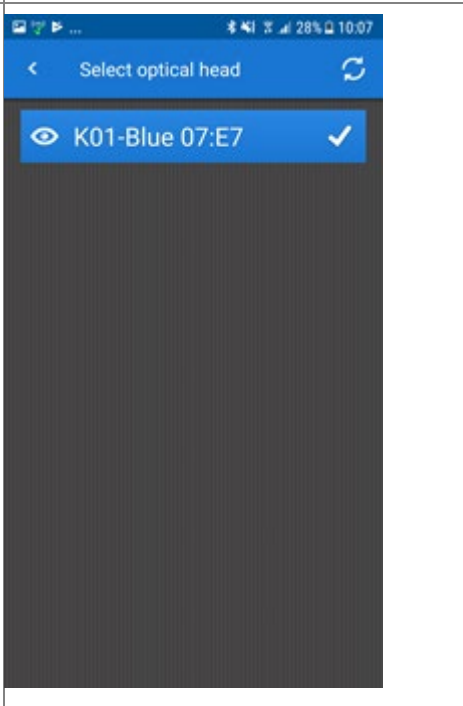
To perform the readability check, the following conditions must be fulfilled:



- the meter must be imported into READY Manager
- READY Manager and READY App must be synchronised (tap **Send/Receive** in READY App if you need to synchronise them)
- READY App must be connected to a WiFi/GSM network.
- The meter must be correctly installed
- READY App must be up to date.
- READY Converter must be compatible with two-way communication (check the label on the back of the converter. Type number must be 6696-30010 or 6696-50010).

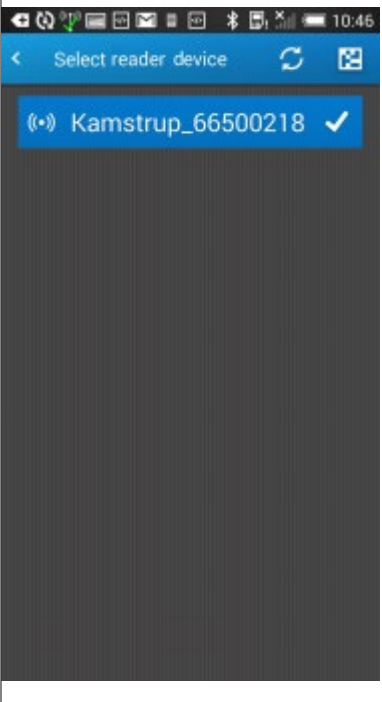

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| 1. | Next to the linkIQ meter you have just installed, open READY App on your smartphone/tablet. | |
| 2. | Tap  in the upper-right corner of READY App and then tap Settings . Turn on Enable linkIQ installation scenario . |  |

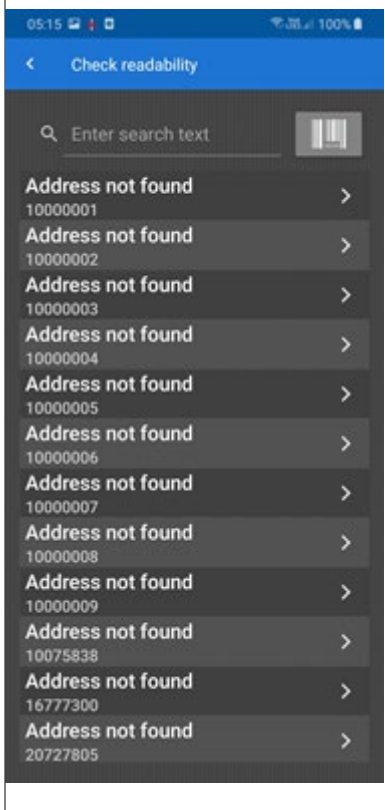

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| 3. | <p>Tap  to go back to the home screen. Swipe the home screen to go to page two of the home screen and tap Installation.</p> |  <p>The screenshot shows the READy app interface. At the top, there's a blue header with 'READy' on the left and 'TEST' and a gear icon on the right. Below the header, there are four large, square buttons arranged in a 2x2 grid. The top-left button, labeled 'Installation', is circled in red. The other buttons are 'Read log', 'Update devices', and 'Meter exchange'. At the bottom, there's a status bar showing 'Data sent and received 9/19/17 - 16:05'.</p> |
| 4. | <p>On the Installation screen that appears, tap Check readability.</p> |  <p>The screenshot shows the 'Installation' screen within the app. The title bar at the top is blue and says 'Installation'. Below the title bar, there are two main buttons. The top button, labeled 'Check readability', is circled in red. Below it is another button labeled 'Meters and repeaters'. The status bar at the very top shows the time as 05:15 and 100% battery.</p> |



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| <p>5.</p> | <p>Select how you want to connect to the meter and activate the installation mode.</p> <p>For <u>water meters</u>, select Optical head and follow step a below.</p> <p>For <u>heat meters</u>, select Optical head, READY Converter or Meter buttons and follow step a, b or c below.</p> |  |
| <p>5a.</p> | <p>Optical head</p> | |
| | <p>Place the optical head on the meter and turn it on.</p> |  |


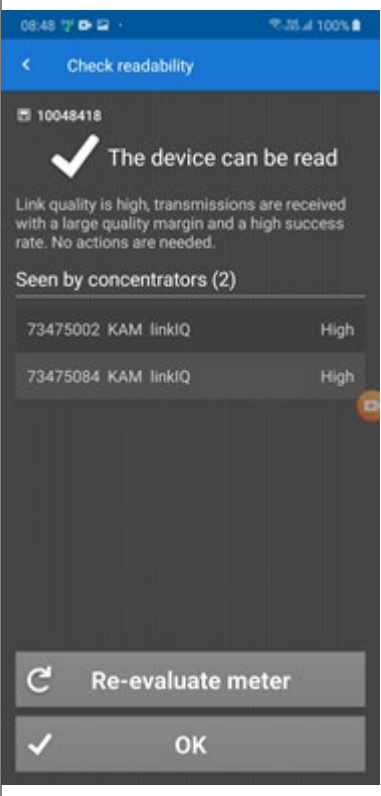
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| <p>Tap Connect.</p> |  |
| <p>Select the optical head in the list. When the optical head you selected in the list turns blue and has a check mark next to it, READy App and the optical head are paired.</p> |  |

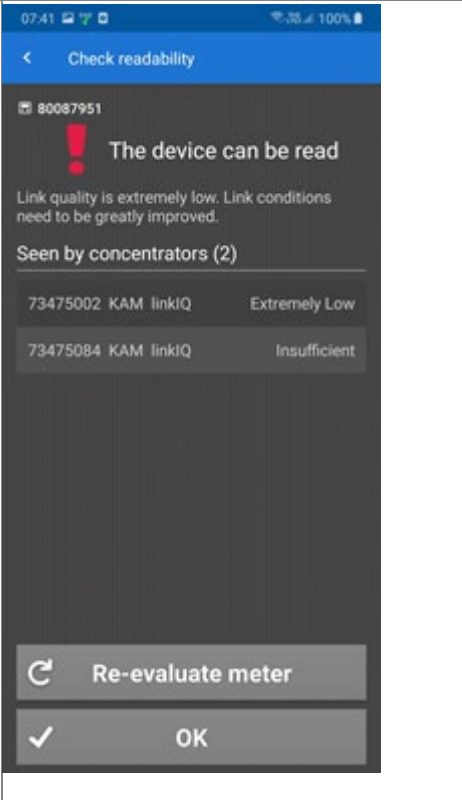
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| | <p>Wait for READy App to enable the installation mode.</p> |  |
| <p>OR 5b.</p> | <p>READy Converter</p> | |
| | <p>Turn on READy Converter.</p> |  |

| | | |
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| | <p>In the list of converters that appears, tap the one you want to pair with.</p> <p>When the converter you selected in the list turns blue and has a check mark next to it, READy App and READy Converter are paired.</p> |  |
| | <p>In the list of meters that appears, select the one whose readability you want to check.</p> |  |
| <p>OR 5c.</p> | <p>Meter buttons</p> | |


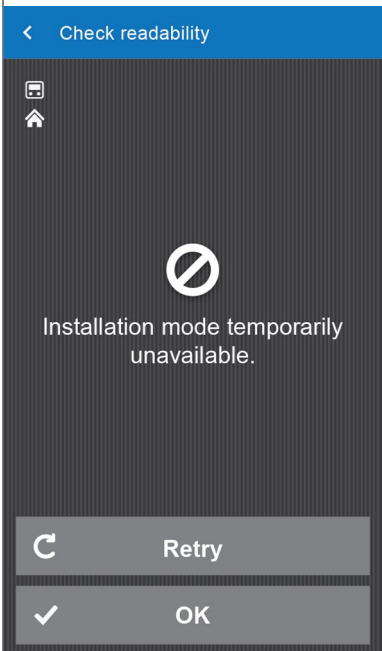
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| <p>In the list of meters that appears, select the one whose readability you want to check (or tap the bar code right-most in the search field), and scan the bar code of the meter you just installed).</p> |  <p>The screenshot shows the 'Check readability' app interface. At the top, there is a blue header with a back arrow and the text 'Check readability'. Below the header is a search bar with the placeholder text 'Enter search text' and a barcode icon on the right. The main content area is a list of 13 items, each consisting of the text 'Address not found' followed by a unique ID number and a right-pointing chevron arrow. The IDs are: 10000001, 10000002, 10000003, 10000004, 10000005, 10000006, 10000007, 10000008, 10000009, 10075838, 16777300, and 20727805.</p> |
| <p>Press and hold the two arrow front buttons on the meter you just installed until "CALL" appears in the meter display. Then tap Done in READY App.</p> |  <p>The screenshot shows the 'Check readability' app interface with instructions for starting installation mode. At the top, there is a blue header with a back arrow and the text 'Check readability'. Below the header, the meter ID '71006392' is displayed. The main content area contains the following text: 'Start installation mode', 'Press and hold buttons until CALL appears in meter display', and a note: 'OBS! Your meter might look different, please consult the meter user guide to turn on installation mode'. Below the text is a diagram of a meter display showing the word 'CALL' in large, black, block letters. Two blue arrows point upwards to the two arrow-shaped buttons located below the display. At the bottom of the screen, there is a grey button with a checkmark icon and the text 'Done'.</p> |

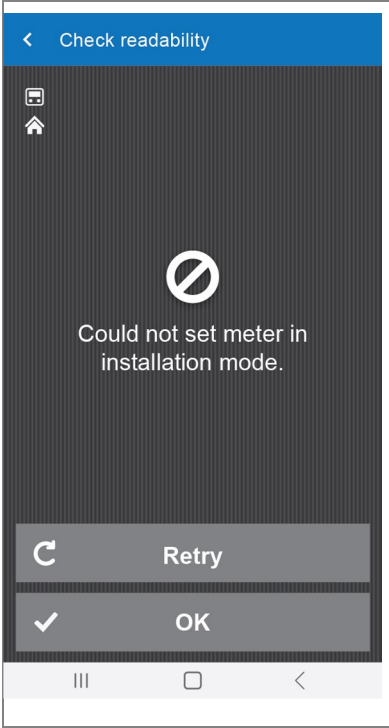
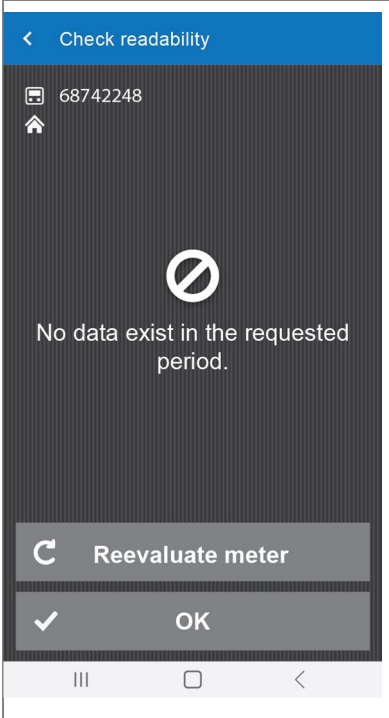
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| 6. | Select the environment in which the meter is installed and tap Done . |  <p>The screenshot shows a mobile application interface for checking meter readability. At the top, the status bar displays the time 05:16, signal strength, Wi-Fi, and 100% battery. The app's title bar is blue with a back arrow and the text 'Check readability'. Below the title bar, the meter ID '71006392' is shown with a home icon. The main heading is 'Select type of installation environment'. Underneath, there is a label 'Installation type' and a blue dropdown menu currently displaying 'Indoor in basement'. At the bottom of the screen is a grey button with a white checkmark and the text 'Done'.</p> |
| 7. | Close cabinet, doors, etc. to test the readability of the meter under normal reading conditions. Then tap Start check . |  <p>The screenshot shows the next step in the application. The status bar now shows the time 05:17. The title bar remains 'Check readability'. The meter ID '71006392' is still visible. The main heading is 'Close installation'. Below the heading, there is instructional text: 'Close meter cabinet, doors, etc. to verify the connection based on the correct reading conditions'. At the bottom of the screen is a grey button with a white checkmark and the text 'Start check'.</p> |

| <p>Wait for the readability check to finish,</p> |  <p>The screenshot shows the 'Check readability' screen in the READY App. At the top, there is a blue header with a back arrow and the text 'Check readability'. Below the header, the phone number '80087951' is displayed. The main content area has a dark background with the text 'Checking readability' and 'This may take a while' above a progress bar. Below the progress bar, it says 'Checking communication'. At the bottom, there is a 'Cancel' button with a circular arrow icon.</p> | | | | | | |
|---|--|-----------------|--------------|---------------------|------|---------------------|------|
| <p>When the readability check is completed, READY App shows which concentrators are able to connect to the meter and the quality of the connection.</p> |  <p>The screenshot shows the 'Check readability' screen in the READY App after completion. At the top, there is a blue header with a back arrow and the text 'Check readability'. Below the header, the phone number '10048418' is displayed. The main content area has a dark background with a large white checkmark and the text 'The device can be read'. Below this, it says 'Link quality is high, transmissions are received with a large quality margin and a high success rate. No actions are needed.' Below this, there is a section titled 'Seen by concentrators (2)' with a list of concentrators and their link quality. At the bottom, there are two buttons: 'Re-evaluate meter' and 'OK'.</p> <table border="1"><thead><tr><th>Concentrator ID</th><th>Link Quality</th></tr></thead><tbody><tr><td>73475002 KAM linkIQ</td><td>High</td></tr><tr><td>73475084 KAM linkIQ</td><td>High</td></tr></tbody></table> | Concentrator ID | Link Quality | 73475002 KAM linkIQ | High | 73475084 KAM linkIQ | High |
| Concentrator ID | Link Quality | | | | | | |
| 73475002 KAM linkIQ | High | | | | | | |
| 73475084 KAM linkIQ | High | | | | | | |

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| 8. | <p>Tap OK to finish the readability check.</p> <p>If the connection quality is okay, no further action is required. If the connection quality needs to be improved, install the necessary equipment to improve the signal strength of the meter, e.g. an external antenna, and check the readability again.</p> | |

2. Troubleshooting

| Error message in READy App | Solution |
|---|---|
|  <p>The screenshot shows the 'Check readability' screen in the READy App. At the top, there is a blue header with a back arrow and the text 'Check readability'. Below the header, the phone number '68742240' and a home icon are visible. In the center, there is a large white circle with a diagonal slash over it, and the text 'The readability cannot be checked.' Below this, there is a grey button with a circular refresh icon and the text 'Reevaluate meter'. At the bottom, there is another grey button with a checkmark icon and the text 'OK'. The Android navigation bar is visible at the very bottom.</p> | <p>Make sure that WiFi or another network is enabled on your mobile phone.</p> |
|  <p>The screenshot shows the 'Check readability' screen in the READy App. At the top, there is a blue header with a back arrow and the text 'Check readability'. Below the header, the phone number '68742240' and a home icon are visible. In the center, there is a large white circle with a diagonal slash over it, and the text 'Installation mode temporarily unavailable.' Below this, there is a grey button with a circular refresh icon and the text 'Retry'. At the bottom, there is another grey button with a checkmark icon and the text 'OK'. The Android navigation bar is visible at the very bottom.</p> | <p>To check the readability you activate the installation mode of the meter. During installation mode, the meter sends data every 10 seconds for 15 minutes. This means that installation mode requires more battery power, and it is only possible to switch to installation mode 11 times during the first 8 weeks after the installation. After that, you must wait 8 weeks before the installation mode is available again.</p> |

| Error message in READy App | Solution |
|---|--|
|  | <ul style="list-style-type: none"> • Tap Retry. • If you use an optical head, make sure it is placed correctly on the meter. • Tap OK and tap Send/Receive on the READy App home screen to resynchronise with READY Manager. |
|  | <ul style="list-style-type: none"> • Tap Retry. • Install an external antenna and try again. • Move the antenna and try again, |