



myDevice

Smart Service Tools



KROHNE

 measure the facts

- Simple and quick device commissioning
- Field device verification incl. test reports
- Monitoring and trend analysis
- Convenient management of all device-specific assets
- Online trainings and tutorial videos





KROHNE Services – At your side, every step of the way

Ever since KROHNE started producing variable area flowmeters in 1921, service has been a vital part of our business and how we connect with our customers. Now a global market leader in process instrumentation and measurement solutions, we have developed a **sophisticated service concept** that covers all aspects of the entire lifecycle of a process plant. Our services encompass all project stages and are available for all enterprise sizes.

As part of the KROHNE Services concept, myDevice collects **smart tools for the entire lifecycle** of a measuring point.

myDevice – Smart world, smart service tools

The smart digital gadgets in our personal lives **help us** save time, get more done with less effort, and even make it easier to live safer lives.

Thankfully, the process world is also becoming a lot smarter – digitalisation, IIoT (Industrial Internet of Things) and Industry 4.0 have become buzzwords.

However, there are some vital questions in this context:

- How do you **ensure plant availability** and plant **safety**?
- And how can we **efficiently support** you as a process plant engineer, owner or operator?

Our answer is myDevice – a **tool suite tailored to the needs of users and operators** of KROHNE process instrumentation. The comprehensive range of smart service tools **makes it a lot easier** for you to commission, verify and monitor devices in the field and give you **convenient access** to all device-related assets.

A complete online training and tutorial portfolio rounds off the suite to help you **resolve your questions** about process instrumentation.

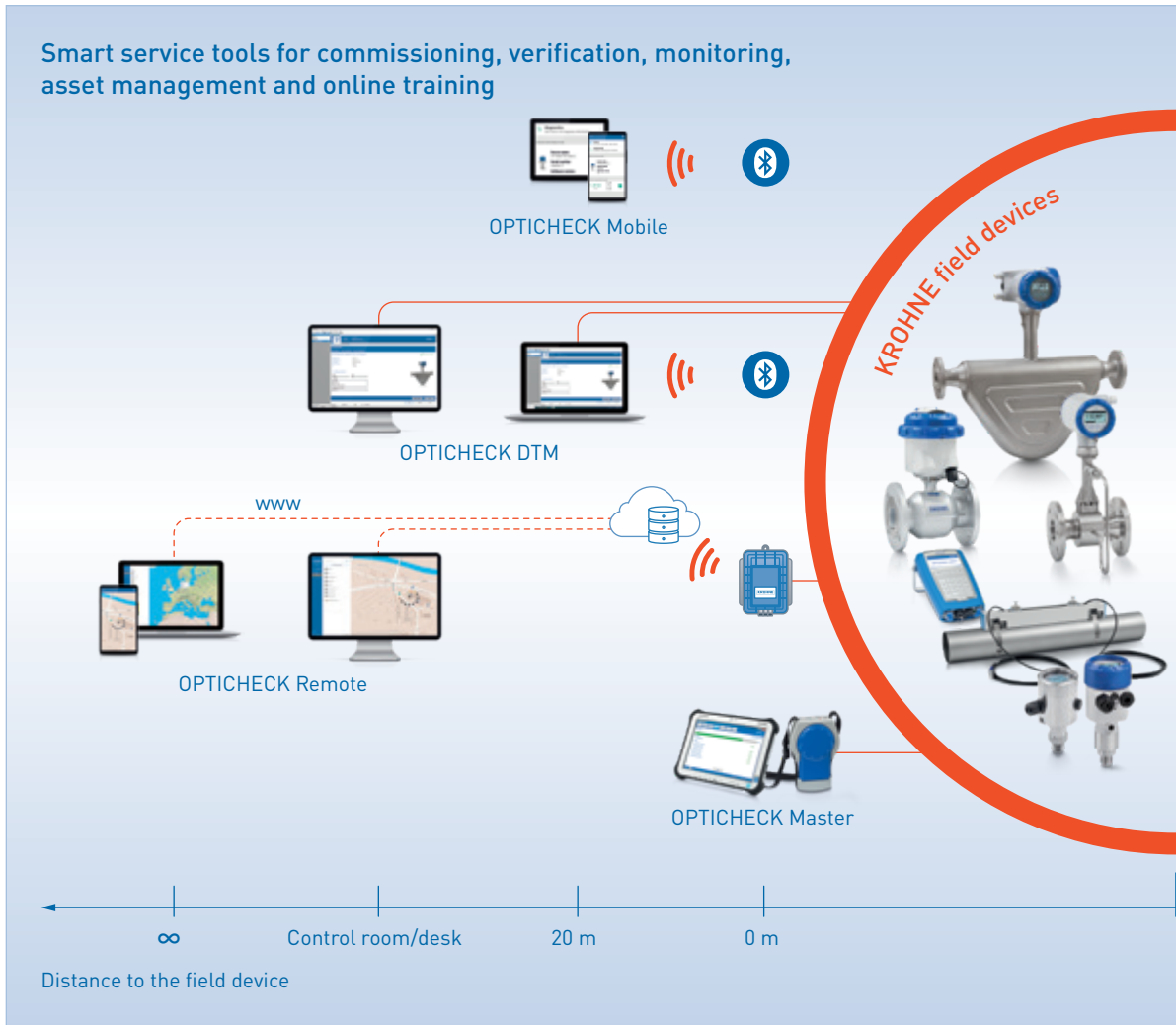


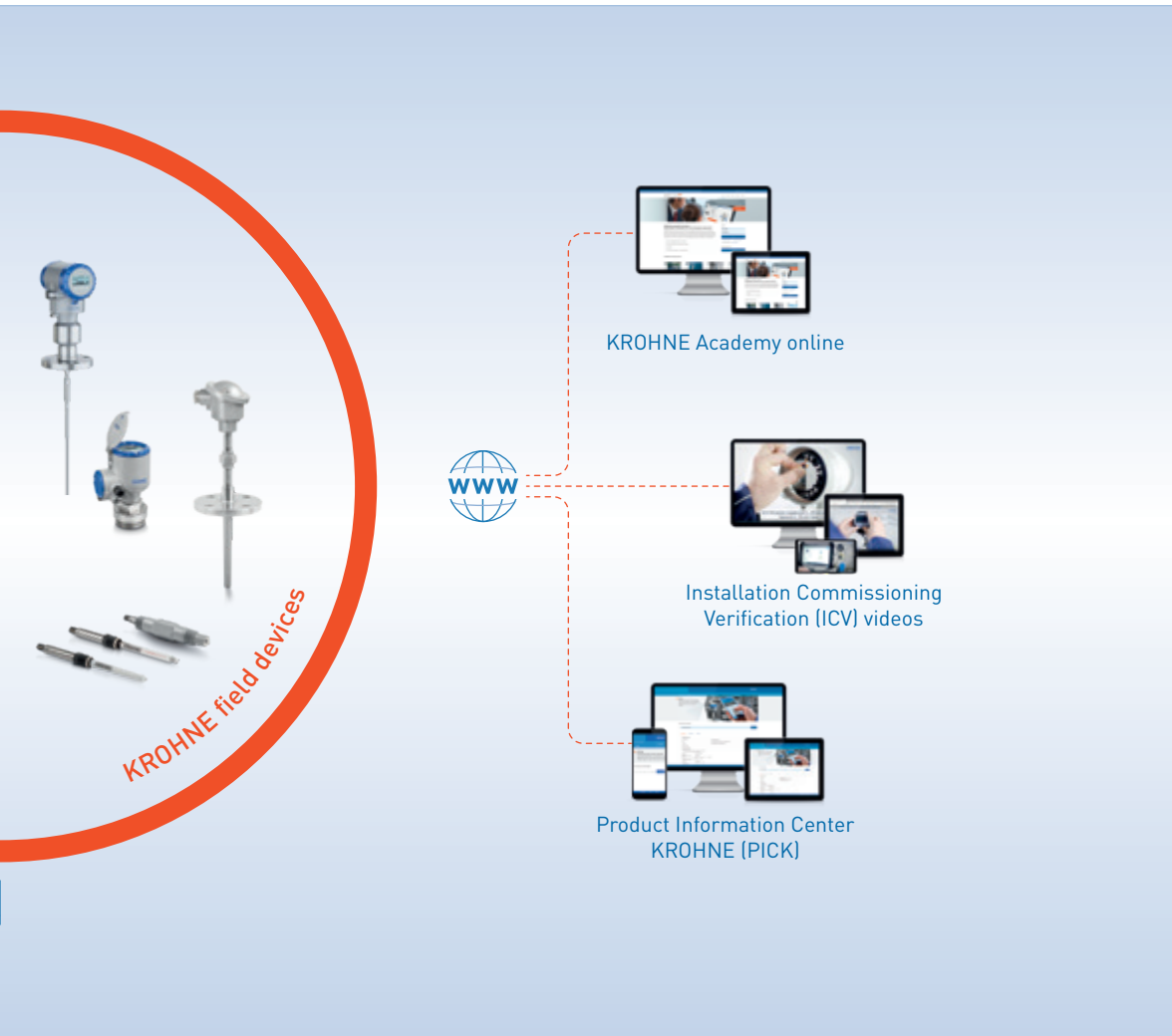
Visit krohne.com/mydevice
and learn more about:

- Wireless parametrisation and commissioning of field devices
- Verification with highest test depth without process interruption
- Reliable information on device health
- Detailed reports for proof test documentation of safety loops (IEC 61508, 61511)
- Remote monitoring from any location
- Device-specific assets via serial number or AutoID acc. to DIN SPEC 91406
- Step-by-step video tutorials
- 24/7 online course availability

myDevice has got you covered

No matter what your responsibilities are, myDevice has the **right tool for all device-related jobs** – from simple device parametrisation to online cloud connectivity and hands-on fieldwork to online training. myDevice includes tools for use on industrial laptops, tablets or smartphones in the field, process control rooms, the office or any other location you may work from.







Device commissioning with device DTMs

Highlights – Commissioning

- Wireless parametrisation and commissioning via OPTICHECK Mobile
- Remote checking of measured values and status information via OPTICHECK Remote
- All device assets relevant for commissioning in PICK
- Step-by-step video tutorials



Device parametrisation with OPTICHECK Mobile

Easy, quick and safe commissioning

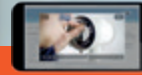
Smooth commissioning has always been a speciality of KROHNE devices – with myDevice, we're taking it to a **whole new level**.

You can conveniently start up the device **from the control room** to set parameters and check and display measured values. And when you're on-site, simply use your smartphone or tablet to connect **via secure Bluetooth®**.

Step-by-step tutorial videos

Sure-fire commissioning **right from the start** – our special Installation Commissioning Verification (**ICV**) videos show you step-by-step how to install, connect, parameterise and check the devices in the process.

ICV videos are available in **eight languages** and can be played on a smartphones, tablets or PCs with **web access**.



View all available ICV step-by-step tutorial videos
at a glance: krohne.link/icv-en



Easy device commissioning with
step-by-step video tutorials



Device parametrisation with OPTICHECK Mobile – Configuration NE 107 device diagnostics



Download the OPTICHECK Mobile app:
krohne.link/opticheck-mobile

- Wireless commissioning and device parametrisation via a secure Bluetooth® connection
- Verification without measurement interruption
- Monitoring of meter performance and application parameters
- Snapshot/event log via email
- Zero flow calibration for max. accuracy
- NE 107 configuration, i.e. mapping of events to NE 107 statuses

Wireless commissioning on-site with OPTICHECK Mobile

OPTICHECK Mobile lets you **manage all settings** via a **secure Bluetooth®** connection on-site to make sure the device functions properly.

The app works with touch-operated devices like smartphones or tablets, even in **ATEX/IECEx Zone 1**.

The menu is **easy to navigate** and lets you **validate** measured values and settings or start **diagnostic functions** that check that the device has been installed correctly.



With OPTICHECK Mobile, you can perform a **variety of commissioning tasks** wirelessly on-site:

- Calibration prior to commissioning or after changes in pipe system
- Density calibration for maximum accuracy in the application, 1 or 2 point possible
- Set the threshold for gas entrainments/two phase signal, visualise entrained gas progress over time to align with other process events, and select which NE 107 status is signalled when exceeded
- Configure NE 107 device diagnostics
- Start a full backup of all device settings, restore an earlier backup, or restore factory settings
- Create a snapshot/event log and share it via email

OPTICHECK Remote for metering or control stations located far away

You'll appreciate **mobile communication-based OPTICHECK Remote** for the convenience of checking both measured values and field device status information from your workstation.

Commissioning complete systems whose metering or control stations are located far away, such as water meters in drinking water networks, **becomes a breeze.**



Direct access to all commissioning-related device assets

While commissioning a KROHNE device via OPTICHECK Mobile you can also go directly to the online Product Information Center KROHNE (PICK). There you'll find all relevant assets such as manuals, handbooks and calibration certificates for a given serial number or AutoID.



Effortless verification at the touch of a button

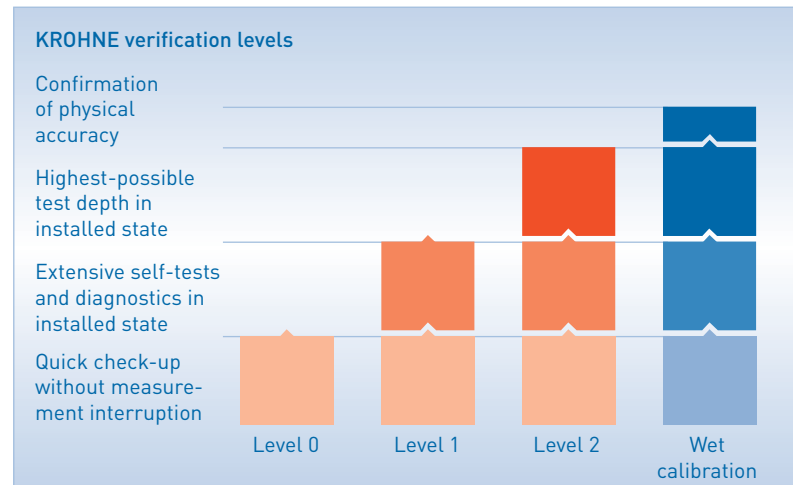
Whether you just want to check meter health, perform rapid troubleshooting or are required to provide a certificate, OPTICHECK tools supply **reliable and verifiable current device status information** based on the integrated diagnostic and self-test functions.

Internal verification can be performed **at any time**, during commissioning or during plant operation. The device **does not have to be removed** from the process – depending on verification level, essential verification aspects can even be carried out **without the need to interrupt the measurement**.

KROHNE verification **fulfils third-party requirements** for the independent verification of field devices.

Highlights – Verification

- Fast on-site status check with OPTICHECK Mobile
- Level 0 and 1 verification with OPTICHECK DTM
- Highest test depth with OPTICHECK Master
- Detailed reports for proof test documentation of safety loops (IEC 61508, 61511)
- ICV – step-by-step video tutorials show all the verification possibilities via OPTICHECK tools



Fast verification without interruption of measurement

With **OPTICHECK Mobile** you run a fast on-site check and see the **current status** of hardware, software and **measured values** even for devices installed in hard to reach areas.

The OPTICHECK Mobile also offers the following functions:

- Reading of integrated diagnostics
- Verification of measured values
- Review of field device configuration



Device verification with OPTICHECK Mobile

Advanced verification on-site or from the control room

Use **OPTICHECK DTM** for more in-depth **verification up to level 1**. It activates the powerful diagnostic functions built into our field devices and starts an **extensive self-test** that gives you precise information about the current device status and generates a test report.

It can be used like any DTM in **3 different ways**:

- From the control room via FDT/DTM frame application
- Wirelessly on-site on a laptop using our Bluetooth® Com DTM
- On-site on a laptop via HART® modem

Device verification with OPTICHECK DTM



Download the OPTICHECK DTM:
krohne.link/opticheck-dtm-en

- Usable with any FDT frame application from the control room or on-site
- Advanced verification (level 0, 1) without process interruption
- Detailed reports for proof test documentation of safety loops acc. to IEC 61508/61511 and for quality management systems (ISO 9001)

In-situ verification with
OPTICHECK Master

Highest-possible test depth without process interruption

The **OPTICHECK Master** is your solution for the most extensive **on-site device verification** available on the market.

It is the essential service tool for ensuring that process measuring devices perform according to their specification. Via **direct connections** to the sensor, electronics and signal outputs, you can perform extended tests without dismantling the measuring device. **In only 10 minutes**, you can get a detailed **test report**.



OPTICHECK Master
for all levels of verification

- On-site performance check and in-depth verification (level 0, 1, 2) without process interruption
- Convenient commissioning of field devices, e.g. zero point calibration
- Detailed reports for proof test documentation of safety loops acc. to IEC 61508/61511 and for quality management systems (ISO 9001)
- Increased safety and extended recalibration intervals of field devices via documented verification history



Detailed test reports

OPTICHECK test results are recorded in **detailed reports** which can also be used to document **proof test of safety loops**, designed according to the functional safety requirements of **IEC 61508 or IEC 61511**.

This means you may **extend proof test intervals** and **simplify** the actual **test procedure** of safety loops. It also significantly contributes to improving overall safety levels **without having to remove the devices** and disrupting plant operation.

Tested	Result	Test Results	Result
Opticheck identification	OK/Fail	Block in Function	Fail
Identification of the measuring device	OK/Fail	Block in Function	Fail
Access function	OK/Fail		
Access authorization	OK/Fail		
Safety Function tests			
1. Input/Output	OK/Fail		
2. Input/Output	OK/Fail		
Control loop tests			
1. Input/Output	OK/Fail		
2. Input/Output	OK/Fail		
3. Input/Output	OK/Fail		

Reliable basis for a maintenance plan

You can **save on maintenance costs**, increase **plant safety** and increase **plant availability** by using myDevice tools to create a **comprehensive maintenance plan** for all your instruments.



Detailed reports for proof test documentation of safety loops (IEC 61508, IEC 61511) and for quality management systems (ISO 9001)



Highlights – Monitoring

- Display of additional values for deeper insights into processes
- Database simplifies long-term trend analysis
- Remote monitoring from any location via OPTICHECK Remote
- ICV – Step-by-step video tutorials show you all monitoring features available in OPTICHECK tools

Valuable monitoring for improved processes

Optimise applications, maintenance planning and troubleshooting by **monitoring individual or multiple measured values** from your processes with OPTICHECK tools.

In addition to primary measured values, such as the volume flow rate of an electromagnetic flowmeter, you can also display and analyse the conductivity or temperature of a medium to gain **additional insights into processes**.

Prevent downtime

Monitoring helps you **detect meter wear** that may have been caused by corrosion or abrasion, so that you can get ahead of device failure. **Log and display trends over time** to detect emerging failures, such as electrodes fouling early and to provide maintenance technicians with **detailed information** that allows them to take effective **preventive action**.



Trend display with OPTICHECK Mobile

Long-term trend analysis

For the simple long-term trend analysis for individual applications or complex processes all measured values and other information from each measuring instrument are **automatically stored in a separate database**.



www

Long-term trend analysis with OPTICHECK Remote

Web-based monitoring of remote applications

If you have a **wide spread measuring network**, myDevice contains a dedicated tool for you – **OPTICHECK Remote** is an application built upon **KROHNE's web-based IIoT platform**. That allows for convenient monitoring of remote applications.

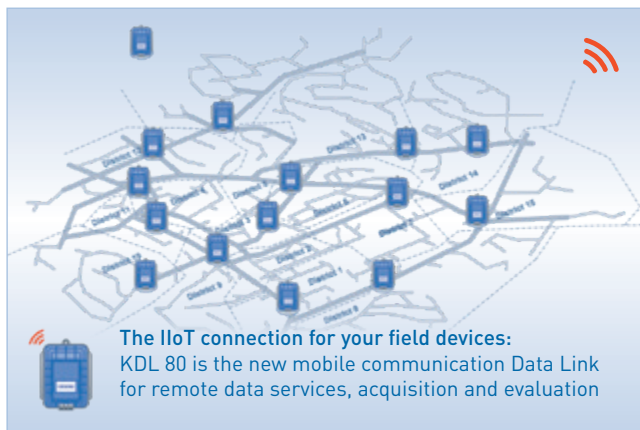
OPTICHECK Remote features **state-of-the-art cybersecurity** technology, including data encryption.

You don't even have to be in the office – thanks to remote access, you can **analyse the data via the Internet from literally anywhere**.



Access from everywhere with OPTICHECK Remote

- Commissioning and monitoring of remote measuring points via mobile communication
- Easy access from any Internet browser
- Checking and logging of measured data, device status and diagnostic information
- Secure cloud database for long-term trend analysis



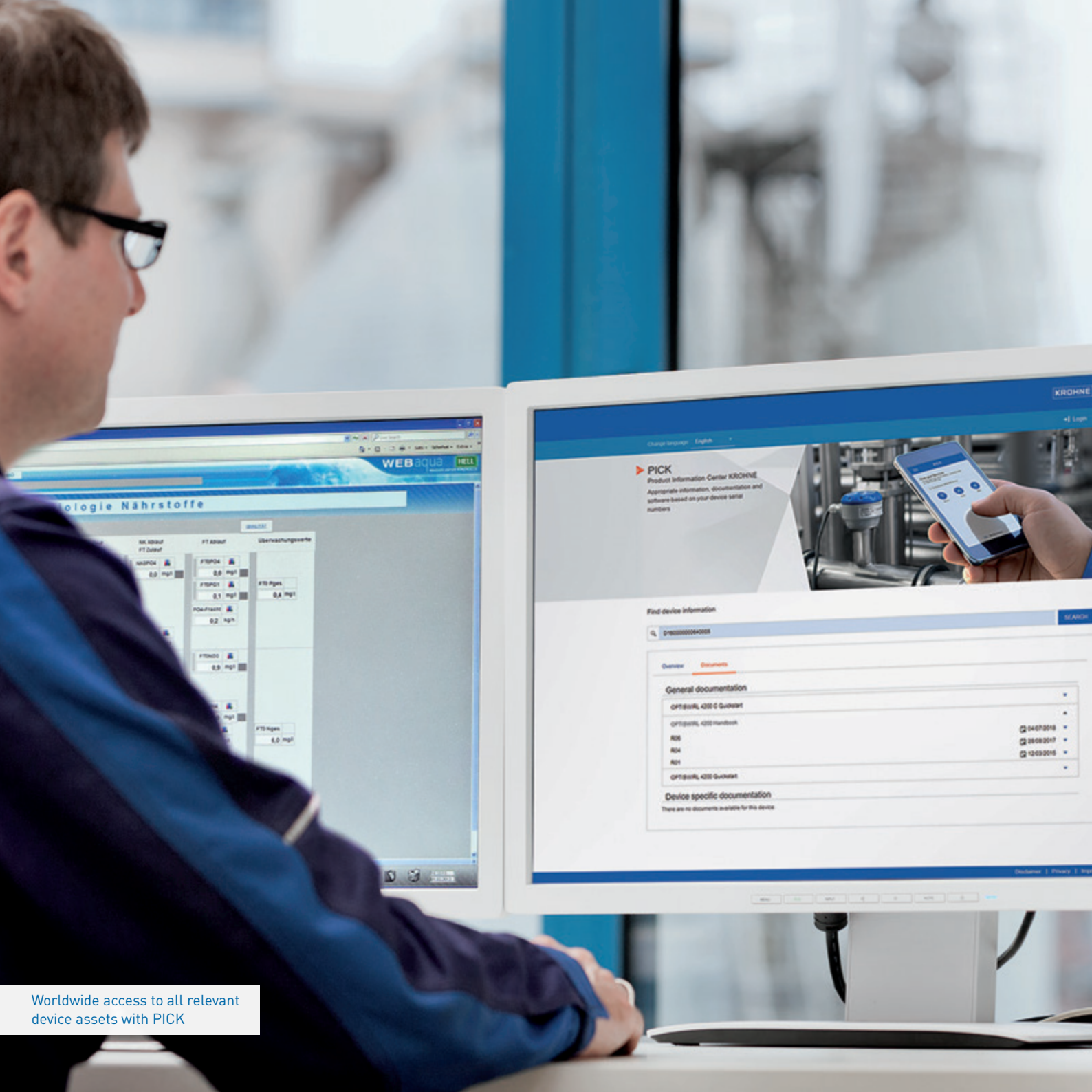
The IIoT connection for your field devices:
KDL 80 is the new mobile communication Data Link for remote data services, acquisition and evaluation



www



Access to all globally available measuring points with OPTICHECK Remote



Worldwide access to all relevant device assets with PICK

Change language: English

PICK
Product Information Center KROHNE
Appropriate information, documentation and software based on your device serial numbers

Find device information

SEARCH

0100000004000

Overview Documents

General documentation

- QFT3000L, 4330-C Quickstart
- QFT3000L, 4330-C Handbook
- RS6 04/07/2016
- RS6 08/08/2017
- RS4 12/03/2016
- QFT3000L, 4330-C Quickstart

Device specific documentation

There are no documents available for this device

Documents | Privacy | Help

Convenient device asset management

With myDevice tools, you can **manage device statuses** and have **access to all device-related assets** – anytime, anywhere.

All data, one location: PICK

The **Product Information Center KROHNE (PICK)** gives you complete access to documents specific to your individual field device and **makes the digital twin of your field device** available.

The following document types can be found in PICK:

- Handbooks
- Quickstarts
- Supplementary manuals
- Calibration certificates
- Factory settings
- Parameter datasheets
- Type plates



Visit the PICK web application:
krohne.link/pick-wa

Download the PICK mobile app:
krohne.link/pick-ma

- Quick access to all device assets via a serial number or AutoID acc. to DIN SPEC 91406
- All device-specific documentation in one location, e.g. manuals, approvals, calibration certificates
- 24/7 access from any Internet browser or via the PICK mobile app



Helpful training tools

Our videos and courses are **excellent sources of knowledge** – from general product, process and regulation information before you buy to detailed device-handling tutorials once you're operating the devices.

Highlights – Training tools

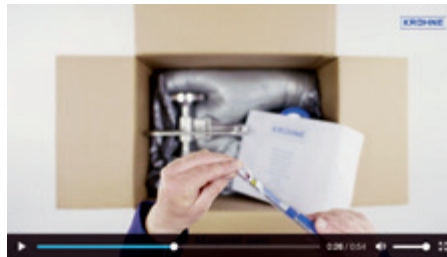
- ICV video tutorials on installation, commissioning and verification of field devices
- KROHNE Academy online – training courses available 24/7

Step-by-step online video tutorials

Installation Commissioning Verification (ICV) videos support you when it comes to **handling KROHNE devices**.

Depending on the device type and its characteristic features, each video covers the following typical processes:

- Unboxing
- Mechanical installation
- Electrical installation
- Commissioning
- Verification



Unboxing

An overview of all components and documents that are included as standard



Mechanical installation

Relevant information regarding alignment, inlet and outlet sections, etc.



Easy device commissioning with step-by-step video tutorials

Get the information you need, right **when and where you need it**. You can access the videos on your PC, tablet or mobile phone.



View all available ICV step-by-step video tutorials at a glance: krohne.link/icv-en

View KROHNE Tutorials channel on YouTube: krohne.link/yt-tutorials

- Short step-by-step videos available online in 8 languages
- Topics covered include unboxing, electrical installation, mechanical installation, commissioning and verification of KROHNE devices
- Easy access from smartphone, tablet or PC



Electrical installation

Correct wiring of power supply or limit switches, for example



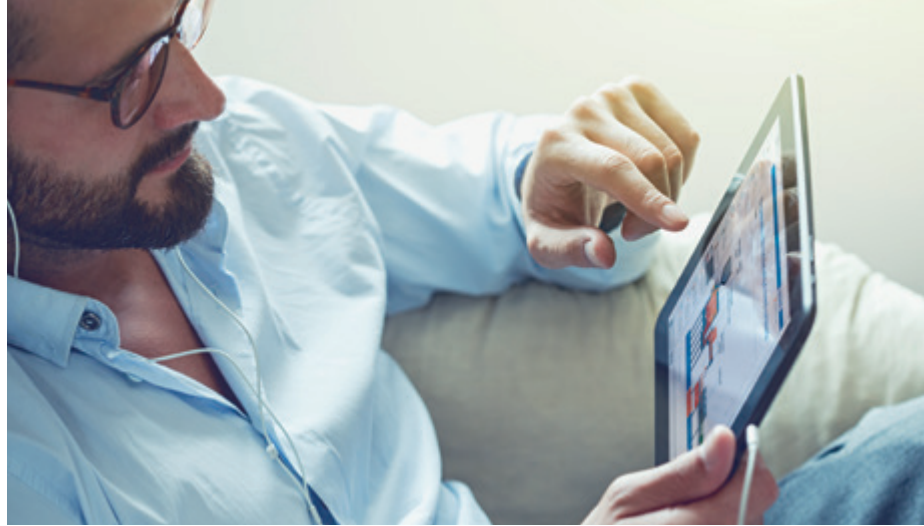
Commissioning

Initial settings, language, user access level and configuration of the current output



Verification

Detailed procedures for using OPTICHECK verification tools



Register for the free online training courses: krohne.link/kao-en

- Hands-on learning materials on process instrumentation, e.g. measuring principles, SIL
- Free and unlimited access to all courses, available in English, German, French, Russian, Chinese
- Learning can be done at your own pace with progress monitoring and course completion certificates
- Commercial-free
- Continuously expanding training database

Knowledge where and when you need it

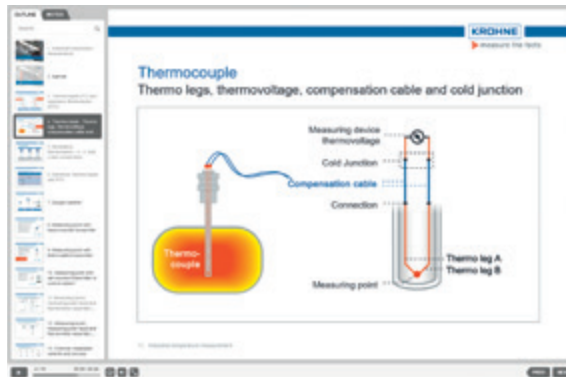
With **KROHNE Academy online** training courses, you are **always up to date** with your process instrumentation knowledge.

The **web-based learning platform**, with more than **15,000 registered users worldwide**, features **audio-enhanced** digital eLearning courses on lots of topics, for example:

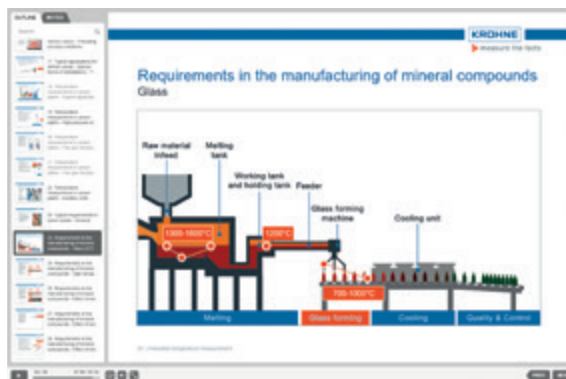
- Measuring principles and basics
- Entrained gas management
- Pipeline leak detection
- Functional safety (SIL)
- Basics of explosion protection
- Basics of gas measurement
- NIR spectroscopy
- Principles of hygiene for the food processing industry

KROHNE Academy not only gives you **direct access** to the **deep knowledge** and **vast experience** of KROHNE. You also get the latest information on standards and regulations from eLearning courses, such as 'Functional safety (SIL)', which we develop in **cooperation with our partners**.

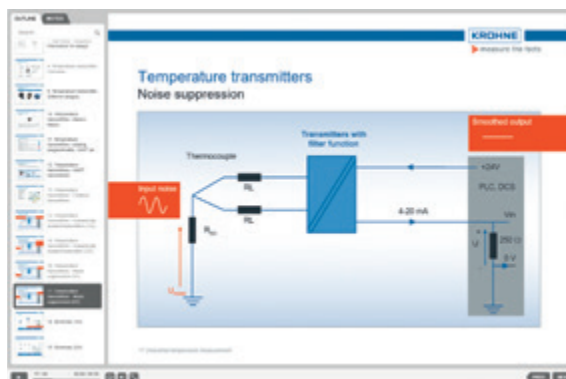
Examples from the 'Industrial temperature measurement' online course



Measuring principles and basics






Industry-specific applications and requirements







Additional information e.g. tolerance classes, material properties

Overview of myDevice Smart Service Tools

myDevice tools	OPTICHECK Master	OPTICHECK DTM	OPTICHECK Mobile
	Handheld for in-depth verification, device commissioning and monitoring	Service DTM for device commissioning and advanced verification	Mobile app for wireless device commissioning, verification and monitoring
			
Highlights	<ul style="list-style-type: none"> • On-site performance check and in-depth verification (level 0,1,2) without process interruption • Convenient commissioning of field devices, e.g. zero point calibration • Detailed reports for proof test documentation of safety loops acc. to IEC 61508/61511 and for quality management systems (ISO 9001) 	<ul style="list-style-type: none"> • Usable with any FDT frame application from the control room or on-site • Advanced verification (level 0,1) without process interruption • Detailed reports for proof test documentation of safety loops acc. to IEC 61508/61511 and for quality management systems (ISO 9001) 	<ul style="list-style-type: none"> • Wireless commissioning and device parametrisation via secure Bluetooth® connection • Verification without measurement interruption • Monitoring of meter performance and application parameters
Commissioning	o Trend function, verification	o Verification	x Parametrisation, verification, monitoring
Verification	x In-situ, level 0, 1, 2	x In-situ, level 0, 1	x Quick diagnostics, e.g. NE 107 status cause
Monitoring	x Trending function	-	x Trending function
Asset management	o Documentation of device statuses	o Documentation of device statuses	o Documentation of device statuses
Training	-	-	-
Accessibility	On-site, wired, close to field device	Remote, from control room; wireless connection on-site, via Bluetooth® up to 20 m from field device	Wireless connection on-site, via Bluetooth® up to 20 m from field device
Equipment	OPTICHECK box, tablet computer running Microsoft Windows and OPTICHECK software	PC running Microsoft Windows and FDT frame, e.g. PACTware™	Mobile devices running Android or iOS, e.g. mobile phone or tablet computer
Connectivity	Cable connection to both tablet computer and field device	Fieldbus coupler or wireless connection via Bluetooth® to field device	Bluetooth®

x = suitable, o = suitable under certain conditions, - = not suitable

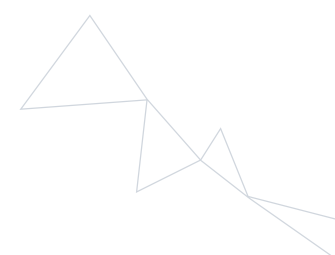
OPTICHECK Remote	PICK	ICV videos	KROHNE Academy online
Web-based tool for device monitoring, commissioning and verification	Web-based product information center with digital twins of KROHNE devices	Video tutorials on installation, commissioning and verification of field devices	Web-based trainings for the process industry
			
<ul style="list-style-type: none"> • Commissioning and monitoring of remote measuring points via mobile communication • Easy access from any Internet browser • Checking and logging of measured data, device status and diagnostic information 	<ul style="list-style-type: none"> • Quick access to all device assets via serial number or AutoID acc. to DIN SPEC 91406 • All device-specific documentation in one location, e.g. manuals, approvals, calibration certificates • 24/7 access from any Internet browser or via the PICK mobile app 	<ul style="list-style-type: none"> • Short step-by-step videos available online in 8 languages • Topics covered include unboxing, electrical installation, mechanical installation, commissioning and verification of KROHNE devices • Easy access from smartphone, tablet or PC 	<ul style="list-style-type: none"> • Hands-on learning materials on process instrumentation, e.g. measuring principles, SIL • Free and unlimited access to all courses, available in English, German, French, Russian, Chinese • Learning can be done at your own pace with progress monitoring and course completion certificates
○ Monitoring	○ Download of all relevant information	x How-to video instruction	-
○ Trending function + specials	-	x How-to video instruction	-
x Plant-wide data monitoring	-	x How-to video instruction	-
○ Documentation of device statuses	x	-	-
-	-	x	x
Globally	Globally	Globally	Globally
KDL 80, PC or mobile device with web browser and Internet access	PC or mobile device with web browser and Internet access	PC or mobile device with web browser and Internet access	PC or mobile device with web browser and Internet access
Mobile communications and Internet	Internet	Internet	Internet

Excerpt of verification possibilities

Example: KROHNE Coriolis mass flowmeters

	OPTICHECK Mobile	OPTICHECK Remote	
		4..20, Puls	Modbus
Process interruption	no	no	no
Measurement interruption	no	no	no
Sensor electronics			
Digital signal processor	yes	no	yes
Electronics temperature	yes	no	yes
Drive circuit	yes	no	no
Sensor circuit	no	no	no
Sensor			
Process temperature and strain sensor	yes	only strain	yes
Sensor coils	yes	no	yes
Drive coil	yes	no	yes
Density calibration	yes	no	yes
Zero flow value	read only	no	yes
Sensor plausibility	yes	no	no
Flow calibration	no	no	no
Outputs			
Current outputs	status only	yes	no
Pulse outputs	status only	yes	no
Control inputs	status only	yes	no
Process			
Entrained gas	yes	yes	yes
Process temperature	yes	yes	yes
General			
Configuration data	yes	no	yes
Value plot	yes	no	no
Device parameter verification	yes	no	no

OPTICHECK DTM		OPTICHECK Master			Wet calibration
Level 0	Level 1	Level 0	Level 1	Level 2	
no	no	no	no	no	yes
no	yes	no	yes	yes	yes
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
no	yes	no	yes	yes	yes
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
read only	yes	read only	yes	yes	yes
yes	yes	yes	yes	yes	yes
no	no	no	no	no	yes
status only	status only	status only	status only	yes	yes
status only	status only	status only	status only	yes	yes
status only	status only	status only	status only	yes	yes
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
no	no	yes	yes	yes	yes
no	no	yes	yes	yes	yes



KROHNE – Products, Solutions, Services

- Flow, level, temperature, pressure, process analytics
- Measuring, monitoring, remote data transmission systems
- Consulting, project management, service concepts

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