

## Data sheet

### Optical read-out head

- Bluetooth optical read-out head
- USB optical read-out head



## Application

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The optical read-out head is a device that enables the user to read configured data in meters and to update the firmware.

The optical read-out head comes in two variants – Bluetooth and USB – depending on the communication to PC or smartphone/tablet.

The optical read-out head is fitted with a permanent magnet, which ensures that the head remains attached on the meter during data collection.

Data is transferred via an infrared light using serial two-way communication.



## Bluetooth optical read-out head

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### Electrical data

Bluetooth 2.0 interface, class 2

Up to 50 m range

700 mAh lithium-manganese rechargeable battery

12 hours operation time when fully charged

Typical charge time 2.5 hours

Low battery indication

Status LED indicating data transmission

On/Off switch

### Mechanical data

Diameter 32 mm

Length 64 mm

Magnetic retention force  $\approx 15$  N

Protection class IP40

Compliant with IEC/EN 62056-21

The Bluetooth optical read-out head is delivered in a suitcase.



### Included in suitcase for Bluetooth optical read-out head

- USB charger (type is country-dependent)
- USB charge cable
- Fixing device for MULTICAL® 21 and flowIQ®
- 20 metal plates for MULTICAL® 403/MULTICAL® 603/MULTICAL® 803
- Bluetooth optical read-out head



When the optical read-out head is to be mounted on water meters of the type MULTICAL® 21 and flowIQ®, a fixing device is clicked on to the meter and the optical read-out head is then placed inside the fixing device.

For the heat/cooling meters MULTICAL® 403/MULTICAL® 603/MULTICAL® 803, a metal plate is affixed on the meter. The metal plate is not designed to be removed afterwards and therefore, the optical read-out head is delivered with 20 of these metal plates.



## USB optical read-out head

### Technical data

USB interface

Supported by Kamstrup USB driver

No supply required

### Mechanical data

Diameter	32 mm
Length	33 mm
Cable length	1.5 m
Magnetic retention force	≈ 15 N
Protection class	IP53

Compliant with IEC/EN 62056-21



## Accessories

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**Fixing device for water meters**



**Fixing metal plate  
for heat/cooling meters**



**Fixing device  
for heat/cooling meters**



## Guideline for use and storage

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The optical read-out head includes a powerful magnet. This magnet may attract other metal objects that may damage the optical read-out head. Therefore, the USB optical read-out head is delivered with a protective disk, which must be mounted when the head is stored.

The Bluetooth optical read-out head must be stored in the suitcase and is not delivered with a protective disk.

## Order specifications

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Type No.	Description
6699099	USB optical read-out head with protective disk
6696005	Bluetooth optical read-out head
66960110	Suitcase for Europe
66960120	Suitcase for USA
66960130	Suitcase for Australia/New Zealand
66960140	Suitcase for India
6561331	Fixing device for the water meters MULTICAL® 21 and flowIQ®
6699042	Fixing metal plate for MULTICAL® heat/cooling meters, 20 pcs.
3026909	Fixing device for MULTICAL® heat/cooling meters

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### Kamstrup A/S

Industrivej 28, Stilling  
DK-8660 Skanderborg  
T: +45 89 93 10 00  
F: +45 89 93 10 01  
info@kamstrup.com  
kamstrup.com