Mobile, handy camera inspection system for inexpensive inspection and damage analysis of pipes, drains, chimneys and other hollow cavities. Self-levelling camera. Transmitter for localising camera heads. Electronic metering. Also for inspection after pipe cleaning work and for acceptance of new installations or repairs. Documentation of pictures and videos with voice recording on SD card. For battery and corded operation.

Camera head S-Color/S-Color S	Ø 25 mm
Camera head S-Color S-N	Ø 33 mm

Pipes, drains, chimneys, other cavities

Camera head S-Color  $\emptyset$  (40)  $50-150\,\mathrm{mm}$  Camera head S-Color S  $\emptyset$   $50-150\,\mathrm{mm}$  Camera head S-Color S-N  $\emptyset$   $70-150\,\mathrm{mm}$ 

REMS CamSys 2 – Brilliant pictures and videos of pipes and drains. Voice recording Self-levelling camera. Transmitter for localising camera heads. SD card slot. Electronic metering. Cordless and mains operation.

#### System advantage

Only **one** controller unit with TFT-LCD colour display for connecting different camera cable sets for different requirements. Therefore inexpensive conversion possible.

### Design

Mobile, handy, light. Can be used everywhere, even in very narrow places. Controller unit connected to the camera cable set by a 2 m connecting cable, removable for easy cleaning of the camera cable set. Various camera cable sets can be used. Plugscrew connections for changing the camera cable sets and the controller unit without tools. Sturdy case for controller unit, voltage supply/charger and accessories.

#### Controller unit with TFT-LCD colour display

Controller unit with 7" colour display with state of the art TFT-LCD technology for brilliant pictures and videos, 178 mm screen diagonal, 720 x 480 pixels. Very light and handy, only 1.3 kg. Sturdy, impact-proof plastic housing, spray protected, glare protection. Integrated stand for different angles of inclination of the screen. Ergonomic grips with soft-grip and adjustable clamping bands, keys for picture and video, for one-hand operation by right and left handers. Small dimensions:  $270 \times 164 \times 70$  mm. Keys for setting the brightness of the LEDs of the colour camera head. Full screen, 2x zoom, 4x rotation options for the picture. Adjustable automatic switch-off. SD card slot. Pictures and videos with voice recording can be saved on an SD card for simple documentation of the inspection result. Insertion depth of the camera is stored in the picture and the video, optionally also date and time of the recording. Pictures can be taken during video recording without impairing the video recording. Immediate playback of saved recordings or transmission to other devices with SD card. Pictures can also be taken later from the video during playback of recorded videos on the controller's colour display. USB connector for direct connection to PC or laptop. Video output socket Composite-Video PAL/NTSC for connecting an external monitor. Connection for voltage supply/charger 100-240 V.

## Cordless and mains operation

Li-Polymer Technology. Controller unit with integrated Li-Polymer battery 3.7V, 7.6 Ah. Light and powerful. Power supply/charger 100 – 240 V, 15 W, with USB port and USB cable for connecting power supply/charger, laptop or other voltage supply. No memory effect for maximum battery performance.

# High resolution special colour camera

High resolution special colour camera with CMOS image sensor and ultra bright, white light emitting diodes (LEDs) with adjustable light intensity up to 1700 mcd and concentrated radiation angle for brilliant colour pictures with evenly bright illumination. Low light requirement due to very high light sensitivity (0.1 lux). Fixed focus and special lens with 90° wide angle, also for detecting the smallest details.































#### Exchangeable cable camera sets

Camera cable set S-Color, consisting of a special high resolution colour camera  $\emptyset$  25 mm with 20 m push cable  $\emptyset$  4.5 mm, very flexible, for small pipe diameters and narrower bends Ø (40) 50 – 150 mm, in the hasp with electronic metering or 10 m push cable Ø 4.5 mm with length mark, very flexible, for small pipe diameters and narrower pipe bends Ø (40) 50-150 mm, in the cable reel. **Camera cable set S-Color S**, consisting of a special high resolution colour camera  $\emptyset$  25 mm with 30 m push cable  $\emptyset$  5.4 mm, flexible, for  $\emptyset$  50 – 150 mm, in the hasp with electronic metering and 33 kHz transmitter for localising the camera head. Camera cable set S-Color S-N, consisting of a special high resolution colour camera Ø 33 mm with 30 m push cable Ø 5.4 mm, flexible, for Ø 70 – 150 mm, in the hasp with electrons and the second seco tronic metering, 33 kHz transmitter for localising the camera head and self-levelling camera for upright pictures and videos. Connection for controller unit. Very small, rounded camera head, water-proof up to 20 m (0.2 MPa/2 bar/29 psi) and highly flexible sliding spring tapered towards the push cable for effortless feeding even through several pipe bends. Camera head with strong, quick-change protective cap with inserted mineral glass pane. Bend-manoeuvring push cable in hybrid technology, with glass fibre core, data cables and plastic sheath, very stable, for long life. Robust, powder-coated, easy to clean cable cage. Hasp with rotary cage for simple unwinding and winding of the push cable and integrated sensor for electronic metering. Carrying case for camera cable set as an accessory.

#### **Guide bodies**

Guide body S-Color/S-Color S and S-Color S-N Ø 62 mm and Ø 100 mm, for greater pipe diameters, can be locked to camera head S-Color/S-Color S or S-Color S-N, as an accessory.

#### **Tracker**

REMS Explorer for localising a camera head with a 33 kHz transmitter, for determining the position of damages or the course of a pipe, as an accessory.



# Supply format

**REMS CamSys 2 Set S-Color.** Electronic camera inspection system for low-cost inspection and damage analysis. Documentation of pictures and videos with voice recording on SD card with specification of date and time. Controller unit in microprocessor technology with 7" TFT-LCD colour display, SD card slot, USB port, video out socket PAL/NTSC, integrated Li-Polymer battery 3.7V, 7.6 Ah, in sturdy, impact-proof plastic housing, spray protected, glare protection, stand. 2 m connecting cable from the controller unit to the camera cable set, voltage supply/charger 100-240V, 50-60 Hz, 15 W, SD card 4 GB, USB cable, video cable, in sturdy case. Camera cable set S-Color with high resolution special colour camera with CMOS image sensor and push cable.

Description	Version	ArtNo.	€
Set S-Color 10 K	High resolution special colour camera $\emptyset$ 25 mm, 10 m push cable $\emptyset$ 4.5 mm with length mark, very flexible, in the cable reel. For small pipe diameters and narrower pipe bends $\emptyset$ (40) 50 – 150 mm, drains, shafts, stacks and other cavities.	175301 R220	3 240,00
Set S-Color 20 H	High resolution special colour camera Ø 25 mm, 20 m push cable Ø 4.5 mm, very flexible, in the hasp with electronic metering. For small pipe diameters and narrower pipe bends Ø (40) 50 – 150 mm, drains, shafts, stacks and other cavities.	175302R220	4 260,00
Set S-Color S 30 H	High resolution special colour camera Ø 25 mm, 33 kHz transmitter for localising the camera head, 30 m push cable Ø 5.4 mm, flexible, in the hasp with electronic metering. For pipes Ø 50–150 mm, drains, shafts, stacks and other cavities.	175303R220	4 480,00
Set S-Color S-N 30 H	High resolution special colour camera Ø 33 mm, self-levelling, 33 kHz transmitter for localising the camera head, 30 m push cable Ø 5.4 mm, flexible, in the hasp with electronic metering. For pipes Ø 70 – 150 mm, drains, shafts, stacks and other cavities.	175304R220	4870,00



All prices excl. VAT 279

# **REMS CamSys 2**

Description	ArtNo.	€
REMS CamSys 2 Basic-Pack		
Controller unit in microprocessor technology with 7"		
TFT-LCD colour display, SD card slot, USB port, video out socket PAL/NTSC, integrated Li-Polymer battery,		
3.7 V, 7.6 Ah, in sturdy, impact-proof plastic housing,		
glare protection, stand, spray protected. 2 m connecting		
cable from the controller unit to the camera cable set,		
voltage supply/charger 100 – 240 V, 50 – 60 Hz, 15 W,		
SD card 4 GB, USB cable, video cable, in sturdy case.	175300 R220	2 080,00
Camera cable set S-Color 10 K		
High resolution special colour camera Ø 25 mm, 10 m push cable Ø 4.5 mm with length mark,		
very flexible, in the cable reel. For small diameters		
and narrower pipe bends Ø (40) 50 – 150 mm.	175305R	1 160,00
Camera cable set S-Color 20 H		
High resolution special colour camera Ø 25 mm,		
20 m push cable Ø 4.5 mm, very flexible, in the hasp		
with electronic metering. For small diameters and	175306R	2 100 00
narrower pipe bends Ø (40) 50 – 150 mm.  Camera cable set S-Color S 30 H	1/3300K	2 180,00
High resolution special colour camera Ø 25 mm, 33 kHz		
transmitter for localising the camera head, 30 m push		
cable Ø 5.4 mm, flexible, in the hasp with electronic		
metering. For Ø 50 – 150 mm.	175307R	2 400,00
Camera cable set S-Color S-N 30 H		
High resolution special colour camera Ø 33 mm, self-		
levelling, 33 kHz transmitter for localising the camera		
head, 30 m push cable Ø 5.4 mm, flexible, in the hasp with electronic metering. For Ø 70 – 150 mm.	175308R	2 790,00
with electronic metering, for \$70, 130 mm.	1700010	2770,00
Guide body Ø 62 mm S-Color/S-Color S,		
for camera head S-Color/S-Color S	175057R	114,00
Guide body Ø 100 mm S-Color/S-Color S,		
for camera head S-Color/S-Color S	175058R	132,00
Guide body Ø 62 mm S-Color S-N, for camera head S-Color S-N	175343R	63,10
TOI Carriera flead 5-Cotor 5-IN	1/3343K	63,10
Guide body Ø 100 mm S-Color S-N,		
for camera head S-Color S-N	175339R	88,50
Protective cap S-Color/S-Color S		
with mineral glass pane, sealing ring,		
for camera head S-Color/S-Color S	175026R	38,60
Protective cap S-Color S-N		
with mineral glass pane, sealing ring,	4550000	
for camera head S-Color S-N	175330R	91,30
REMS Explorer, tracker for localising a camera head		
with a 33 kHz transmitter	175312R	2 110,00
		,00
Carrying case for camera cable set	175123R	137,00
	4850005	405.55
Case with inlay	175323R	105,00



280 All prices excl. VAT