ENV1361DIE



Jet-powered, steerable
HD VIDEO NOZZLE
for many applications

VIPER - the rugged, professional tool for cleaning and inspecting branched pipes in one run.





VIPER

## VIPER®-THE TROUBLESHOOTER

**With a range of up to 80 meters** typical areas of application are drain & sewer cleaning, blockage removal, construction industry, municipal utilities, lateral inspection from the mainline, pipe cleaning and pipe rehabilitation, crossbore safety, industrial and other specialized applications.



# THE VIPER®-VARIATIONS

**For even more flexibility,** the VIPER® system is available in three other versions. Individual adaptions are possible on request.



### KEY FEATURES (all VIPER® Models)

- Pipe Sizes 2" 16" (DN 50 400)
- Passes through and steers into multiple 45 deg bends in lines DN 80 (3") and larger
- Passes through and steers into multiple 90 deg bends in lines DN 100 (4") and larger
- HP hose length up to 200m (600ft) working pressure up to 300 BAR (4350 psi)
- Hose diameter DN 10 (3/8") or DN 13 (½")
- Required water supply 140 BAR (2175 psi) 45 l/min (12 gpm)
- fresh water and recycled water operation

## **VIPER®**»light«

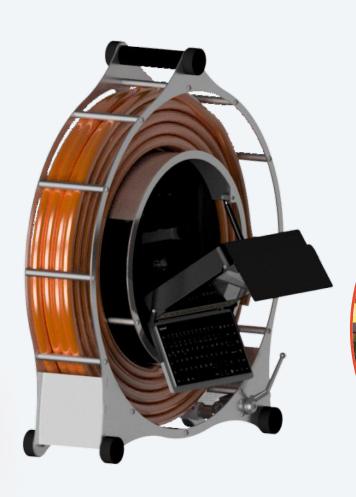
Small and portable with 30 m (100ft) HP hose in the hose basket. Control unit can be folded in and out.

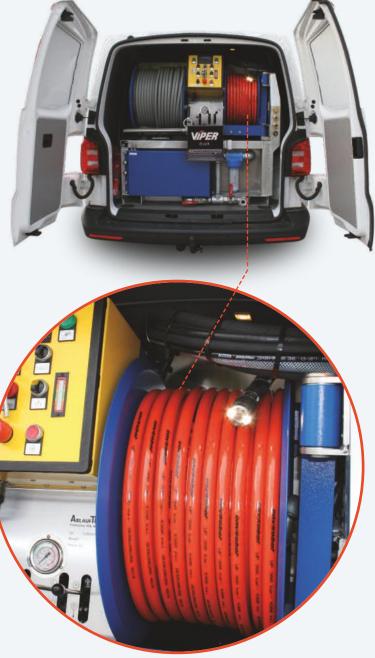
- With 30 m (100 ft) hybridhose DN 10 (3/8 ") or
- 25 m (82 ft) hybridhose DN 13 (1/2")
- W x H x D: 65 x 74 x 19 cm (26 x 29 x 6 inch)
- Weight 19 kg (41 lbs) including 30 m (100 ft) hybrid-hose DN 10 (3/8")

### **VIPER®** »truck«

Permanently mounted on the HP jetter truck, available with up to 200 m (600 ft) HP hose.

The control unit can be connected to the swivel bracket e.g. on the vehicle roof or at the inside of the tailgate.









#### **CAMERA**

- Full HD live camera 1080 x 1920 with digital zoom
- 160° wide-angle lens with 4mm (0.16") sapphire glas
- dimmable power-LED's for pipes larger 400mm (16")
- 3D sensor for inclination and direction indication
- locator Sonde 512 Hz / 640 Hz
- integrated forward jetting nozzle with exchangeable nozzle
- depth rating 100m (300 ft) with internal pressure monitoring
- stainless steel body with impact protection
- detachable from the Flex Segment thanks to the modular design

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- diameter 40mm (1.6") length 40mm (1.6")
- spacer for pipes larger 3" (DN 80)

#### **FLEX SEGMENT**

- easy to steer into branches by simply turning the hose
- steering nozzle with exchangeable ceramic nozzle inserts
- integrated valve to switch the forward jetting nozzle
- rugged, highly flexible protective hose
- 6 pcs. cleaning and forward thrust nozzles, 30° angle
- exchangeable ceramic nozzle inserts, suitable for recycling water
- wear-resistant stainless steel components
- connection with quick connects

#### **HYBRIDHOSE**

- thermoplastic HP jetter hose DN 10 (3/8") or DN 13 (1/2")
- integrated camera cable
- rated 300 BAR (4300 PSI), length up to 200 m (600 ft)
- little pressure loss, abrasion resistant, floatable and low friction
- same quick connects on each side
- reversible for even wear
- can be combined e.g. 40 m DN 13 (3/8") extended with 20 m DN 10 (3/8")

#### **HOSE TROLLEY** (Viper® + Viper® compact)

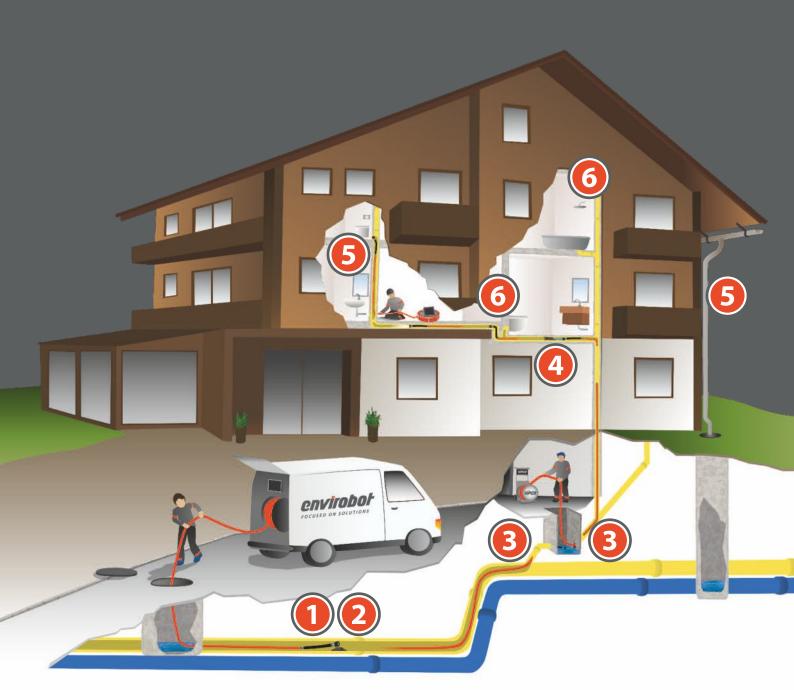
- rugged, ergonomic aluminumframe, powder coated
- Extendable telescopic handle with swivel mount for the control unit
- Stepless reel brake, ball valve, tool compartment
- anti flat wheels + load assist slide rail
- ½" size fitting for connecting to jetters

#### **CONTROL UNIT**

- Rugged, waterproof aluminum housing
- Swivel mount bracket with quick-change system
- Exchangeable Li-lon battery with 3 hours battery life
- 12 V/24 V DC (vehicle) 110 V -240 V AC (shoreline)
- High-resolution 10 "display, sunlight readable, scratch-resistant protective screen
- Video- and photo capturing in HD on thumbdrive, 512 GB max. capacity
- Text overlay with memory for configurable pages, words and status lines
- Data overlay for cleaning pressure, camera internal pressure, distance counter, rotation angle, inclination, orientation, battery status, time, date
- Rugged, waterproof keyboard for convenient typing
- large buttons for video and photo recording, zoom, microphone, locator sonde, LED control, etc.
- Headset connection

#### **OPTIONAL**

- rotating nozzle
- spare battery
- external battery charger 12 V 24 V / 110 V 240 V
- analog Video output (PAL/NTSC)
- NEW
- umbrella (glass fiber reinforced) NEW



- Precise localization through powerful location transmitter.
- Steer around obstacles and protruding pipes.
- Steer through junctions.

- Clogging removal through switchable forward jetting nozzle.
- Climb vertical stacks.
- Cleaning and inspection from before unreachable areas.









