



# **vCamDrain**

**Technical Specifications V1.0** 













### A. Typical Applications

Component	Specification
Purpose	A tool to inspect and create digital video recordings and JPEG images of the interior of small-diameter pipes, drains and ducts. The typical application is the inspection of plumbing.
System Components	<ul> <li>Viewing &amp; Recording Device:         Smartphone or tablet</li> <li>Reel:         70-foot / 21m         100-foot/30m</li> <li>Camera Head         18mm/0.78" Fixed position</li> </ul>



#### B. vCam Drain Wireless Reel

Component	Specification
Model Name	vCamDrain Wireless Reel
Model Number	VX113-1
Dimensions	12.4"(L) x 9.6"(W) x 16.4(H) (316mm(L) x 244mm(W) x 416(H))
Weight	70-foot / 21m - 16 lbs. (7kg)
	100-foot/30m - 17 lbs. (7.7kg)
Environmental	IP65
Display	Per the smartphone or tablet running the vCam Mobile Controller app
Power	AC Power: 100V / 240V, AC power powers and charges the internal battery
	DC Power: 12V DC external power supply powers and charges the battery
	Push-button control on the front panel turns the unit on and off
Internal Batteries	An Internal Lithium-ion rechargeable battery (supplied with a 12V charger)
	<ul> <li>A 6-hour charge will supply 12 hours of intermittent use</li> </ul>







Battery Indicators	<ul> <li>A membrane LED label shows the battery status in four segments</li> <li>The power label glows green when powered on</li> <li>The VMC App shows the units battery status</li> </ul>
File Format	<ul> <li>MP4 Video (1920 x 1080)</li> <li>JPEG image capture (1920 x 1080, 96 dpi)</li> </ul>
Storage	<ul> <li>USB Port - Supports up to 128 GB Removable USB Drives</li> <li>VMC App - Record directly to the smartphone or tablet</li> <li>Recoed to the VMC app and copy to the reels USB port</li> </ul>
Wi-Fi	30' / 10m Wi-Fi range for use with the vCam Mobile Controller (VMC) app
Sonde	<ul> <li>512Hz, 640Hz or 33kHz selectable in the app setup menu</li> <li>Locatable up to 9 feet / 3m</li> <li>Spring assembly consists of the spring, coiled cable with sonde and steel lanyard</li> </ul>
Drum Brake/Lock	Friction and locking brake knob
Pushrod	Conductors, coax and fiberglass rods in a high-density polyethylene (HDPE) jacket
Pushrod Length	70-foot / 21m, 100-foot / 30m
Pushrod Diameter	0.354" / 9mm
Pushrod Bend Radius	3" / 75 <i>mm</i>
Pushrod Minimum Break Strength	500 lb. / 2.2KN
Temperature Range	Storage: -4°F to 158°F (-20°C to +70°C)  Operating: 14°F to 122°F (-10°C to +50°C)
Operating System	Updatable over the air via the VMC app or the reel USB port with files available from the Vivax-Metrotech website.
Options and Accessories	<ul> <li>Reel carry bag</li> <li>Optional screw-in handle adapter provides ½-20 threads for popular mounting options</li> <li>vLoc3-Cam Sonde locator</li> </ul>

### vCam Mobile Controller App

Controls	Functions
Camera LED Dimmer	Touch icon control on the front panel to adjust the brightness of the camera LEDs
Distance Counter	Touch icon control on the front panel to zero distance count*
Sonde Operation	<ul> <li>Touch the Sonde icon to activate and deactivate the Sonde</li> <li>A sonde icon appears on the app's status bar when active</li> </ul>
Microphone Operation	<ul> <li>Touch the Microphone icon to activate and deactivate the smartphone or tablet microphone</li> <li>A microphone icon appears on the app's status bar when active</li> </ul>







Recording Control	<ul> <li>Touch the Record icon to start a recording, and touch a second time to stop recording</li> <li>The record icon flashes red when a recording is in progress</li> <li>Touch the Pause icon to pause and resume a video recording.</li> </ul>
Image Capture	<ul> <li>Touch the Picture icon to capture the image</li> <li>The screen momentarily splashes yellow, confirming the image capture</li> </ul>
Video Playback control	<ul> <li>Touch icons in the app to pause the video, rewind/fast forward, play and stop</li> <li>Icons appear on the status bar to advise which function is active</li> </ul>
Digital Zoom	Pinch the screen to zoom
On-Screen Display (OSD)	OSD displays the system time, date, and distance of the deployed pushrod
Text Overlay	<ul> <li>Use the app's on-screen keyboard to add text comments</li> <li>Save unlimited pages of text comments</li> </ul>

#### C. Camera Head

#### D18-HD 0.70" / 18mm fixed position camera head

Component	Specification
Model Name	D18-HD
Model Number	VX113-2
Application	Used with the vCam Drain in pipe diameters from 1-1/2 to 3 inches / 40 to 75mm
Horizontal Resolution	1080p HD
Focus Point	100mm
Aperture / Field of View	90°
Lighting	48 Lumens
Auto Upright	None, fixed position, non-leveling camera
Construction	Stainless-steel housing with scratch-resistant Sapphire lens
Environmental	Water resistance up to 11 BAR pressure
Temperature Range	Storage: -4°F to 158°F (-20°C to +70°C)  Operating: 14°F to 122°F (-10°C to +50°C)
Dimension Installed	0.73" (Dia.) x 0.71" (L) / 18.6mm (Dia.) x 18.1mm (L) without standard skid 1.0" (Dia.) x 0.73" (L) / 25.6mm (Dia.) x 18.6mm (L) Diameter with standard skid installed
Weight	0.029lbs (0.013kg) without standard skid 0.035lbs (0.016kg) with standard skid







Options	2.25-inch Guide skid
	Camera exchange program

#### D. Shipping Weights and Dimensions (Shipping dimensions and weights are approximate)

Model	Dimensions and Weights
System	<b>D</b> : 19.3 x 11.2 x 18.5in (490 x 285 x 470mm)
	<b>W</b> : 70-foot / 21m - 17.6lbs (8kg)
	100-foot / 30m – 19.2lbs (8.7kg)

#### E. Warranty

Item	Parameter
Warranty	<ul><li>One year</li><li>Extended warranty available</li></ul>

#### F. Disclaimers

Vivax-Metrotech Corporation will continue to update and improve its products. The information in these specifications is subject to change, obsolescence, or superseding. Check with your local sales representative or Vivax-Metrotech Corporation for updates.

Dimensions and weight conversions are approximate (metric data is the most accurate). Shipping dimensions and weight are approximate.

Product and accessory specifications and availability information are subject to change without prior notice.

\*The distance count provided is designed to provide an estimate. Care should always be taken when locating the camera head with a sonde or pipe and cable locator.







