

REVADER®

HALO

& HALO PLUS



**Our popular CCTV solution,
NDAA Compliant**

HALO & HALO PLUS

Our next generation redeployable camera, constructed with non-China origin parts



Reliable, versatile & easy to use

Our all new HALO redeployable camera is a professional, ruggedised CCTV solution which **deters crime, enables successful prosecution** through video evidence and provides surveillance in a highly **cost-effective** manner — **unlike traditional CCTV systems** which incur large infrastructure, human and maintenance costs. The HALO cameras incorporate a Hanwha PTZ camera as standard and alongside other NDAA compliant components.

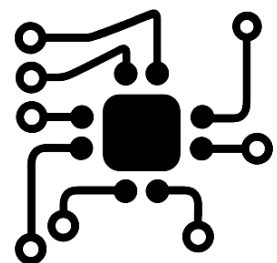
Flexible to your requirements, HALO cameras are **straightforward to install** in virtually any location and can be **rapidly repositioned** to respond to changing security demands.

The cameras can easily be **remotely controlled and monitored** via a low-bandwidth link, with video saved to on-board edge storage. HD quality video can be downloaded remotely via wired, wireless and mobile networks. HALO also utilises a range of **video analytics** software tools.

Incorporating the latest in video technology

Each HALO unit incorporates a **2MP PTZ camera**, a Pico-ITX **motherboard**, a router for **dual band WiFi & 3/4G connectivity**, a **2TB** hard drive for over **30 days on-board video recording** with **analytics** and a **1.5 hour failover battery**.

The standard HALO has one PoE out connector. More demanding applications could benefit from our **HALO PLUS**, which combines all of the standard features with **2 PoE out** connectors, an **audio** connector and a **5TB** hard drive. We can also supply video streaming only models. All models provide email notification on loss of power, are available with a variety of software options and with **5G routers**.



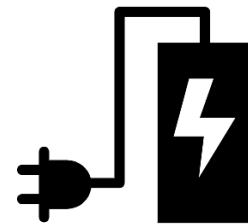
Engineered for all environments

Constructed from the highest quality durable materials, HALO performs highly in even **the most challenging weather conditions** and every unit is tested to rigorous **IP66/IP67** standards before leaving our factory.



Use with any power source

HALO cameras are able to operate from virtually any power source, including **battery, mains** and a variety of renewable options, such as **solar panels** and **turbines**. We also produce our own range of rechargeable high energy battery packs.



Integrate with your existing equipment

HALO can act as a standalone redeployable camera or work alongside multiple HALO cameras in a dedicated video network or controlled by individual laptops, tablets or mobile devices.

As standard, both the HALO & HALO PLUS units use the “Hanwha Wave” Video Management Software (VMS) and integrate seamlessly with all existing Hanwha systems. HALO can be also be configured with a range of other VMS platforms on request.



Camera head options

HALO & HALO PLUS units are supplied as standard with Hanwha **2MP PTZ low light camera heads**. However, alternative camera heads from other manufacturers can be accommodated on request, including those for **360 degree** panoramic viewing.



ONE SOLUTION

ENDLESS OPPORTUNITIES

Intruder Detection

Mounted on the HALO exterior and connected via PoE connector, our **intruder detection receiver** can receive alerts from up to 64 battery powered wireless detectors situated at distances up to 1km. Ideal for perimeter security applications.

Part No. 62180 (HALO only)



Public Address

Attached via a separate 8-way connector, our **redeployable microphone & speaker with amplifier** provides pre-recorded messages prompted by alarms or direct commands from a remote observer. Ideal for issuing verbal warnings and announcements in public settings.

Part No. 62170 (HALO PLUS only)



Remote Power Control

Mounted on the HALO's exterior and connected via the power input connector, our **power switch** enables users to activate and deactivate the units on command, to conserve failover battery or **PowerPak** consumption for extended use. Ideal for scenarios where there is an absence of external power, or for strategic deployment ahead of pre-determined events, such as protests, festivals, concerts and sporting occasions.

RF—Part No. 62190

Scheduled—Part No. 62193

GSM—Part No. 62196





Use without power for extended periods

Extend the life of the internal battery with our rapid rechargeable **PowerPak** high energy battery units. Enables autonomous use on timed supplies or daylight saving lampposts,. Can provide power for up to 4 days' continuous operation and be activated or deactivated as scheduled or on command until the PowerPak is fully discharged using our Intelligent power switch.

Part Nos. 61502 to 61505

Intelligent Power Switch Part No. 62218



Intensive coverage with two cameras

Attached to HALO via PoE connector, our **redeployable HALO Auxiliary Camera** provides continuous HD video for live monitoring and recording. Ideal for instances where surveillance is required in two directions simultaneously.

Part No. 62155



Wide area coverage with multiple cameras

A single HALO can accommodate up to six additional **HALO Redeployable Wi-Fi Cameras**, with additional licensing, each operating at distances of up to 0.3km line of sight, providing continuous HD video transmission for recording and live monitoring. Two Wi-Fi cameras can operate directly or up to six via HALO Access Point. Ideal when surveillance is required in multiple positions and directions over an extended area, such as motorway junctions, sports arenas and at large public events.

Part No. 62165

SPECIFICATION

Mechanical

Chassis	Plastic & Stainless Steel
Surface	Powdercoat Grey
Connectivity	IP68 circular connectors: Power in, Power over Ethernet (PoE) out (2 x PoE out*), Audio out*, GSM/3G/4G, WiFi antenna
Dimensions	470mm x 168mm Diameter
Weight	From 6.0Kg
Durability	Vandal-resistant IP66
Operating temperature	-20°C to 55°C

Electrical

Input voltage	12-24V DC
Input protection	Short circuit & overcurrent protection
Typical Power	24W + Connected Devices
PSU rating	120W - Part No. 61652
Internal battery	1.5 hours (without accessories)
Loss of Power	Email notification

Camera & Lens

Camera Type	Ruggedised PTZ
Min. Illumination	0.03Lux Colour. F1.6 1/30 sec 0.003 Black and white. F1.6 1/30sec
Lens	1.6~F3.0

Coverage	360°Endless PTZ
Zoom	12 x optical 32 x digital

PTZ Devices	Full 3-axis control
Day and Night	Low Light Auto Colour/B/W intelligent range of 50 meters

Connectivity

Mobile Network	4G LTE, 3G HSUPA, 3G HSDPA, 3G UMTS, GPRS. Or 5G option. Two SIM slots
Wi-Fi	802.11b/g 2.4GHz & 5GHz Wi-Fi WEP/WPA/WPA2 Encryption
Supported Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnp, RTP/RTSP/RTCP, SMTP, FTP, DHCP, NTP, DNS, ARP, IGMP, PPPoE, CoS, QoS
PoE Out	Proprietary 48V DC 15W Max
SIM Card	Fixed Public IP Address; User Arranged

Security

Password profile	Multi protection levels
Diagnostics	Remote, secure diagnostics and repair functionality are available
Remote Administration	Remote control via TCP/IP network including restart and reboot
Automatic System Restart	After power loss, system auto-resumes

Recording System

Video Resolution	Multiple choice up to 1945 x 1097 2.16M
Operating System	Embedded
Still Image	JPEG
Record types	Continuous, schedule, motion, alarm, event and input trigger

Overwrite modes	Configurable auto deletion and overwrite function, by time or drive allocation
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Detection	Motion, video loss
Time zone	Regional settings, NTP
Compression	H.264 H.265, H265+
Data/frame rate	Variable 1 - 25 fps, 64kbps-16Mbps
Min video format	352 x 240

Max video format	1945 x1097 to 2.16Mbps (max)
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Video Management Software (VMS)

Hanwha Wave as standard, other VMS options available. Fully supported by most control room VMS platforms

Storage

Hard Disk	1 x 2.5" Form Factor Platter 2TB (5TB - option)
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Analytics

A range of analytical tools such as loitering, direction detection, virtual line, face, motion detection, privacy masking.

SIM Cards

"Fixed Public IP Address" - Revader can provide SIM and Data packages or offer a complementary service to insert new or replacement SIM cards provided by the customer.

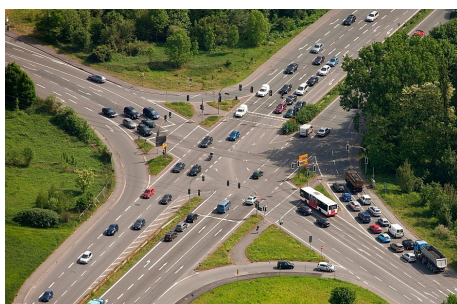
* Denotes **HALO PLUS** attributes

		4G	5G
HALO	Part No.	62115	62117
HALO PLUS	Part No.	62126	62129
All units supplied with PSU 61652			

TYPICAL APPLICATIONS



PERIMETER INTRUDER DETECTION



CROSSROAD SURVEILLANCE



CROWD CONTROL (NO POWER)



REMOTE LOCATIONS (NO POWER)



CONSTRUCTION SITES



PUBLIC SPACE SURVEILLANCE

E&OE