

Orbiter

Honeywell



**ORBITER PLATINUM, GOLD,  
LITE AND INSIGHT**

THE WORLD'S MOST COMPREHENSIVE  
RANGE OF MICROSPHERES

## Orbiter Platinum, Gold, Lite and Insight Microspheres

All Orbiter Platinum, Gold, Lite and Insight Microspheres combine industry-leading features with state-of-the-art design, making them the ideal choice for virtually all CCTV applications. With its proven reputation for innovation, Honeywell Security manufactures the leading-edge Microsphere range, embracing a number of unique features including functionality, practicality, quality, attractive design and intrinsic reliability. Not to mention the quick and easy plug & play characteristics that have made Honeywell Security the undisputed first choice for specifiers and engineers the world over.

## Europe's largest specialist

Honeywell Security has grown into one of Europe's largest CCTV manufacturers, with a comprehensive range of market-leading CCTV products led by the world-renowned Microsphere range. The very latest addition to that portfolio, the Orbiter Platinum Microsphere has astounded the market with innovations such as 27x optical zoom and a completely new way of thinking about the versatility and functionality of a CCTV system. These features, combined with the economical Orbiter Insight, mean that Honeywell Security has a comprehensive range of Microspheres with features for all applications and budgets.

Now part of the \$23 Billion Honeywell Group, Honeywell Security is able to harness massive buying power and global development expertise. These benefits are then shared with customers in the form of unbeatable prices and unsurpassed performance.



8" External Orbiter  
Wall Mount

## Setting the standard

The Orbiter Platinum Microsphere is the benchmark fully functional camera system and the leading price performer in the industry. The Orbiter Lite and Insight Microspheres were developed in response to customer demand for a leaner specification at the most competitive cost.

An extensive range of mounting options are available, for deployment in external and internal locations.

For locations of a classical or heritage character, the "Regent" housing option delivers all the benefits of the Orbiter Platinum or Gold system with an outward appearance that is in keeping with any period architecture.

Alternatively, the Vandal Resistant Housing enables any Orbiter camera to withstand a high level of violent attack without detriment to its operation. A retrofit version, that can be fitted to any exiting 8" Orbiter, including the "Regent" housing, is also available.

NVT video transmission is now built into all Orbiter Microspheres as standard\*, allowing the video signal to be sent via CAT5 UTP cable. This represents even further flexibility, both for the end user and installer, and can offer significant cost savings over conventional video signalling methods.

## Day/night changeover cameras

The Orbiter Colour/Mono Exview and Colour/Mono Wide Dynamic range changeover cameras offer the best of both worlds – with significant performance benefits over standard cameras. Full colour surveillance is provided during the day down to 0.7 lux, with an automatic changeover to mono at night when light levels are lower. The mono night time operation is fully IR responsive. The Exview and Wide Dynamic range technology delivers cleaner, crisper images in both colour and mono, particularly where the viewing scene contains large differences in light levels and contrast.

## Premier quality

All Microspheres are built around premier quality, high resolution cameras including colour, colour/mono, Exview and colour/mono Wide Dynamic range options. Advanced CCD technology, with better than 50 dB signal to noise ratio means low light operation, also unsurpassed image quality down to 0.7 lux in colour and 0.01 lux in mono. For lower light levels "Frame Integration", a process that increases the exposure time of each Microsphere image, enables useable colour images to be produced at 0.7 lux and 0.01 lux or better in mono.

## Privacy zones

The Orbiter range offers the most advanced, scaleable Privacy Zone functionality available today. A preset view is used to define the area to be blanked. This then scales to remain the same size on the view as the operator pans past the

blanked area or zooms in and out from it. Both Platinum and Gold systems have 28 privacy zones, with the ability to create complex shapes. Lite and Insight models have one.

## Sector identification when used with MaxCom control equipment

Both Orbiter Platinum and Gold models divide the full 360° pan coverage into 16 sectors, each with identification text. Sector width is programmable and each "ident" has 10 characters. This allows views to be clearly labelled so the operator knows exactly what the Microsphere is targeting.

## Fast zoom lens with intelligent control

The Orbiter range features three optical zoom options. Lite and Insight models are available as colour only with an 18x and 16x zoom respectively.

The Gold range also has an 18x zoom (lens 4.1 to 73.8mm) colour and colour/mono option, whilst the Platinum provides 27x zoom (lens 3.25 to 88mm). The Larger 88mm zoom focal length on the 27x zoom enables an operator to read a car number plate successfully at greater distances – and that's just the optical zoom. Once the lens is fully zoomed in, the Microsphere briefly pauses before entering a digital zoom mode, adding a further 10x magnification. Intelligent zoom control software reduces the pan and tilt speed for the Microspheres as the lens is zoomed in, enabling very fine control when tracking events at a distance.

\* except 8" internal, internal adjustable pole and external heavy duty pole mount



Internal  
Ceiling Mount



Vandal  
Resistant Housing



External  
Soffit Mount



Regent

## Wide range of sizes

Internal Microspheres are available in a choice of either 5" or 8" versions. External Microspheres are available as 8" versions. Internal mount options include: False Ceiling and Hard Ceiling, a range of "plug-and-play" ceiling mounts from 80mm to 3m and wall mounts. For external use, there are wall, soffit, pole, the 8" "Regent", designed to suit traditional building architecture, and the 8" Vandal Resistant Housing for tough environments.

## Auto focus and auto iris

Perfect picture quality is achieved by advanced auto focus control to ensure that, no matter what the zoom position, the picture is in the sharpest possible focus. Auto iris compensates automatically for changing light levels, adjusting picture "exposure" continually. Complementing these features, the Microsphere has added technical capabilities such as gain, iris shutter, exposure compensation and brightness. These are all continuously monitored by a dedicated microprocessor that balances each function to guarantee optimal picture quality no matter what the conditions.

## High-speed precision control 360° continuous rotation

All Microspheres have high-speed precision control, with electronic braking. High quality motors with precision gearing enable pan speeds of 400°/second between presets, decreasing to 0.1°/second for fine control when fully zoomed in. Slip rings allow for a full 360° continuous rotation. This ensures that,

## Key Features

State-of-the-art design
Plug and play - like fitting a light bulb
Range of mounting options - wall, ceiling, hard ceiling, false ceiling, pole and corner bracket
Colour, colour/mono Exview and colour/mono wide dynamic range
Multiple 3rd party telemetry protocols are built in as standard
Scaleable privacy zones (28 for Gold, 1 for Lite, 1 for Insight)
Remote reset and home position
Variable speed up to 400°/second with variable speed zoom lens
Range of zoom lens options 16 to 27x zoom
Up to 128 preset positions (64 for Lite, 8 for Insight)
Up to four programmable tours (2 for Lite, 1 for Insight)
Four mimic tours (1 for Lite, 0 for Insight)
Combined "Twisted Pair" and "In-Coax" telemetry
Alarm inputs, 8 for Gold and Platinum, 4 for Lite
360° continuous rotation and 180° flip
Low light capability, 0.4 lux colour and 0.01 lux mono with full frame integration
Better than 50 dB signal-to-noise ratio
IP65 rated external versions
NVT fitted as standard

during tracking or surveying, the panning system does not hit the traditional "end stop". The Microspheres also offer a rapid 180° flip control feature for monitoring any object or person that passes below.

## "In-Coax" and "Twisted Pair" Telemetry control

It is no longer necessary to specify "In-Coax" or "Twisted Pair" telemetry. All Orbiter Microspheres can be controlled by either telemetry in the same unit. This makes ordering simple and reduces your stock. Integrated NVT connections present even more installation flexibility and possibilities.

## Preset positions alarm control and tours

The Orbiter Platinum and Gold Microspheres have 128 presets and four tours (each with 128 presets per tour). The Lite has 64 presets with two tours and Insight has 16 presets per tour. Presets are easily set up and recalled by the operator from a keyboard controller or automatically triggered on alarm activation.

## Home position

When enabled, this feature allows the Orbiter Microspheres to return to either a "home" preset or "home" tour after a predefined time period. This is to avoid a situation where a Microsphere is left pointing at irrelevant scenes and recording useless information.



Privacy zones switched off



Privacy zones switched on



Day / night operation

## Mimic tours

Four "Mimic" tours are available on the Orbiter Platinum and Gold Microspheres and one tour is provided on the Lite. Here the Microsphere can be switched to "Learn" mode where a sequence of pan, tilt, zoom, focus and preset positions can be "memorised" for up to three minutes duration.

## "Alarms to head"

Orbiter Microspheres have "alarms to the head". The Platinum and Gold have eight alarm inputs with two relay outputs and the Lite models have four inputs and one output.

When an alarm input is activated at the camera head, the Microsphere will call the relevant preset (1-8 on the Platinum and Gold, 1-4 on the Lite).

As a result of the activation, the state of the alarm output relay will change allowing other equipment to be activated. The second relay output on the Orbiter Platinum and Gold is under manual control from the MaxCom keyboard. This feature can simplify system design and represent cost savings on system cabling.

## Plug & play simplicity

Fast and simple installation is key to all Honeywell Security products. That's why the Microsphere range offers "plug-and-play" simplicity – fitting like a light bulb to its mount. All Microspheres are pre-built with the exception

of the "Top Cover" and "Acrylic" which are quickly and easily fitted on-site. The Orbiters automatically select "Twisted Pair" or "In-Coax" telemetry, according to what is connected. The result? Fast, simple and easy installation, allowing you to do more jobs in the same amount of time.

## Built-in telemetry receiver and full opto-isolation

Advanced telemetry control electronics feature gain and lift, meaning that cable runs of more than 500m are possible with RG59 grade coax. The isolated power supply reduces the possibility of earth loops and full opto-isolation, built in for the RS485 data communications, ensures trouble free operation. This focus on design detail at board level gives trouble free installation and operation during the Microsphere's life.

## Complete range of Honeywell Security control equipment

Honeywell Security Microspheres are used extensively around the world and their open protocol philosophy has ensured that the Microspheres operate with most other manufacturers' control systems. Indeed, Honeywell Security's own MaxCom range of control systems is designed to complement the feature set of the Orbiter Microsphere range, ensuring that the system will deliver optimum performance with a full suite of advanced features.

## Video and Telemetry transmission

The Honeywell Security Microsphere range uses industry standard methods for video transmission and RS485 data driven telemetry control. This ensures compatibility with most CCTV transmission methods and systems.

## Remote reset facility

The Orbiter Platinum and Lite Microspheres have a built-in remote power up reset. A second remote reset can return the Orbiter to its factory settings.

## Demonstration systems

Packing neatly into a robust flight case, our compact demonstration kit makes it easy to present all the features of the Orbiter Platinum and Lite Microspheres whenever you require.





# Orbiter Platinum - the proven leader in dome technology



## Orbiter Platinum Range

With the introduction of the Platinum Range, Honeywell Security has gone beyond the gold standard. Boasting features and specifications to outperform everything that has gone before, Honeywell Security's technology-packed Platinum model features an unsurpassed range of groundbreaking innovations – and upholds the Honeywell Security's quality pledge with a full three-year warranty.

- Superb low light colour performance
- All the other innovations that Honeywell Security customers have come to expect such as the industry-leading Scaleable Privacy Zone, built-in option of Twisted Pair or In-Coax telemetry and Honeywell Security legendary plug & play versatility

## Key Features

- 27x optical zoom, 10x digital zoom
- Colour and mono operation
- Accurate colour rendition
- Plug and play technology - as simple as fitting a lightbulb
- Full range of mount options available
- Compatibility with all Honeywell and other leading control equipment
- 28 scaleable privacy zones
- Remote reset
- Home position
- Variable speed from 0.1°/sec up to 400°/sec with variable speed zoom lens
- 128 presets
- 4 programmable tours
- 4 mimic tours
- 8 alarm inputs
- Better than 48dB signal to noise ratio
- IP65 rated external versions

# Orbiter Platinum, Gold, Lite and Insight specification

	INTERNAL					EXTERNAL		
Model	Insight	Lite	Gold	Gold X	Platinum	Gold	Gold X	Platinum
Optical zoom	16x	18x	18x	18x	27x	18x	18x	27x
Digital zoom	2x	8x	8x	8x	10x	8x	8x	10x
Total zoom	32x	144x	144x	144x	270x	144x	144x	270x
Colour/mono	N	N	N	Y	Y	N	Y	Y
Alarm inputs	0	4	8	8	8	8	8	8
Relay outputs	0	1	2	2	2	2	2	2
Presets	8	64	128	128	128	128	128	128
Preset tours	1	2	4	4	4	4	4	4
Presets per tour	16	128	128	128	128	128	128	128
Mimic tours	0	1	4	4	4	4	4	4
Remote reset	Y	Y	Y	Y	Y	Y	Y	Y
Home feature	Y	Y	Y	Y	Y	Y	Y	Y
Telemetry options	Coax and Twisted Pair							
NVT™ built-in*	Y	Y	Y	Y	Y	Y	Y	Y
Privacy zones	1	1	28	28	28	28	28	28
Line lock facility	Y	Y	Y	Y	Y	Y	Y	Y
Sector idents	N	Y	Y	Y	Y	Y	Y	Y
Wide dynamic range	N	N	N	Y	Y	N	N	Y
X wave technology	N	N	N	Y	N	N	Y	N
Scanning system	PAL/NTSC (depends on model number)							
Resolution PAL (TVL)	460	460	460	460	>450	460	460	>450
Resolution NTSC (TVL)	470	470	470	470	>460	470	470	>460
Pixels PAL	752x582							
Pixels NTSC	768x494							
Lens size (mm)	4.1 - 65.6	4.1 - 73.8			3.25 - 88	4.1 - 73.8		3.25 - 88
Focus	Auto/Manual							
Iris	Auto/Manual							
Min. illumination – colour (lux)	0.7	0.7	0.7	0.7	1	0.7	0.7	1
Min. illumination – mono (lux)	N/A	N/A	N/A	0.01	0.005	N/A	0.01	0.005
S/N ratio (dB)	50	50	50	50	48	50	50	48
Operating temperature (°C)	-10 to +50					-20 to +50		
Variable pan speed (°/s)	0.1 - 400							
Pan coverage (°)	Continuous 360							
Variable tilt speed (°/s)	0.1 - 200							
Tilt coverage (°)	90							
Nominal power supply (VAC)	24							
Recommended PSU – 230V	HPTV2401D					HPTV2402DWP or HPTV2402DWPn		
Recommended PSU – 110V	HPTV2401					HPTV2402WP or HPTV2402WPN		
Mounting options	Pendant, Wall, False Ceiling, Hard Ceiling, NPT					Wall, Pole, Soffit, Regent, VR, Heavy Duty		
Honeywell protocols	VCL, Ultrak/Diamond							
Third party protocols	N	Pelco P, Pelco D, Vicon, Molynx, Ernitek						

\* NVT is not available on 8" internal models, the internal adjustable pole mount and the external heavy duty pole mount.

Housings are light grey, pantone 427C. Regent housings are black, RAL9005.

The manufacturer reserves the right to alter the specification of products without prior notice.

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