

High-Speed Positioning System



- ▶ Pans up to 100° per second, 360° continuous rotation
- ► Tilts up to 40° per second, -90° to +40° range
- Choice of Dinion^{XF} Color or Dinion 2X Day/Night cameras and motorized zoom lens combinations
- IP 66 rated, tough, attractive casing with up to 20 kg balanced load
- Optional Bosch AEGIS UFLED Infrared Illuminator assembly attaches directly to the High-Speed Positioning System for operation in dark environments
- Multi-protocol including Biphase, Bilinx, Pelco-D, and third party protocols on RS-485

The Bosch High-Speed Positioning System (HSPS) is a complete solution that is high on quality and performance. It can pan 360° continuously at speeds of up to 100° per second. An extensive range of options lets you tailor the system to your specific requirements. For example, the HSPS offers a variety of Dinion^{XF} and Dinion 2X cameras and lens combinations, and the system can be ordered with two Bosch AEGIS UFLED Infrared Illuminators for operation in dark environments.

Autopan and patrol functions are accurate to within 0.02°, with text labels assigned to presets for added convenience. Automatic lens scaling, which keeps zoom and speed synchronized, ensures smooth video pictures throughout pan and tilt movement.

A completely self-contained unit, the High-Speed Positioning System is easy to install and maintain. Multiprotocol capabilities, including Bilinx and Biphase, also simplify connections. The tough, protective casing can support a 20 kg balanced load and is IP66-rated – ideal for weathering the outdoor conditions common in traffic and industrial applications. All units have a sunshield and an integrated wiper. The wiper is available with an optional washer.

High-Speed Pan/Tilt with Infrared Illumination

The IR 360 version of the High-Speed Positioning System comes with a bracket and two Bosch AEGIS UFLED Infrared Illuminators, without the need for rotating cables. The IR 360 system features two local alarm inputs, one input for synchronizing the infrared lighting and one relay output for an intelligent local alarm.

System Overview

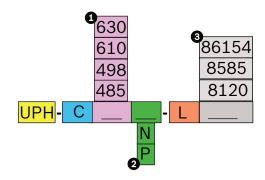
Modular Design

The High-Speed Positioning System is based on four modules: the camera and lens sled assembly, the Main Pan/Tilt unit including the base power supply, the optional mounting hardware and the optional illuminators.

The modular design allows you to customize an HSPS to fit your specific application. To build an HSPS, select one option from **Modules A** and **B**. In addition, you may further customize your HSPS by selecting an optional mounting solution from **Module C** and two optional illuminators from **Module D**.

Module A: Camera and Lens Combination

Choose from a selection of Bosch Dinion cameras and lenses. This module comes pre-assembled and attached to a sled that is installed inside the HSPS housing. Use this ordering chart to construct the Camera/Lens combination:



1 Camera

| 485 | LTC 0485 Dinion ^{XF} Color Camera, 1/3 in. |
|-----|---|
| 498 | LTC 0498 Dinion 2X Day/Night Camera, 1/3 in. |
| 610 | LTC 0610 Dinion ^{XF} Color Camera, 1/2 in. |
| 630 | LTC 0630 Dinion 2X Day/Night Camera, 1/2 in. |

2 Video Format

| N | NTSC |
|---|------|
| Р | PAI |

3 Lens

| 8120 | 8-120 mm motorized zoom lens |
|-------|---|
| 8585 | 8.5-85 mm IR-corrected motorized zoom lens |
| 86154 | 8.6-154 mm IR-corrected motorized zoom lens |

Module B: Pan/Tilt System with Power Supply

Choose a main pan/tilt system and power supply combination. The **Standard System** contains a high-performance pan/tilt head, camera housing with an optional integrated wiper, and a telemetry receiver. The **IR 360 System** contains all the Standard System features plus a bracket assembly for two (2) illuminators.

| Option | Description |
|--------------|---|
| UPH-HD-230 | Standard System230 VAC, 50 HZ Power Supply |
| UPH-HWD-230 | Standard SystemWiper230 VAC, 50 HZ Power Supply |
| UPH-HWD-120 | Standard SystemWiper120 VAC, 60 HZ Power Supply |
| UPH-HD-24 | Standard System24 VAC, 50/60 HZ Power Supply |
| UPH-HWD-24 | Standard SystemWiper24 VAC, 50/60 HZ Power Supply |
| UPH-HWDIR-24 | IR 360 SystemWiper24 VAC, 50/60 Hz Power Supply |

Module C: Mounts

Choose an optional mounting solution for the Standard or for the IR 360 System.

| Option | Description |
|------------|-------------------------------------|
| MTC-PUPH | Top of pole mount |
| MTC-WUPH | Wall mount |
| MTC-CORN-W | Corner adapter for wall mount |
| MTC-POLE-W | Side of pole adapter for wall mount |

Module D: Illuminators

Choose two (2) optional Bosch AEGIS UFLED Intelligent Infrared Illuminators. ^{1, 2, 3}

| Suggested Models | Description | |
|------------------|-------------|--|
| UFLED10-8BD | 10°, 850 nm | |
| UFLED20-8BD | 20°, 850 nm | |
| UFLED30-8BD | 30°, 850 nm | |

- 1. The IR Illuminator option is available only with the UPH-HWDIR-24 (IR 360 Main Pan/Tilt System).
- 2. You may select two of the same or two different illuminators.
- 3. 940 nm (covert) and White Light (visible) wavelength options also compatible. Performance characteristics will vary. See the UFLED datasheet for illumination distances.

Functions

Multi-protocol

The High-Speed Positioning System operates with Bosch hardware platforms – Divar, DiBos, Allegiant – and is fully compatible with control protocols such as Biphase, Bilinx, Pelco-D, and third party protocols on RS-485. Biphase allows control of pan, tilt, zoom, focus, and the wiper / washer. Bilinx offers the same functionality as Biphase, with additional communication capability for configuring Dinion camera settings.

High-Speed Pan/Tilt with Automatic Scaling

The unit can reach a very fast panning speed of 100° per second with 360° continuous panning in manual mode. The HSPS can achieve tilt speeds of 40° per second in manual mode. It also offers ample scope for changing the horizontal view, with movement ranging between -90° below and +40° above the horizon. To ensure smooth, clear pictures during rapid movement, automatic scaling synchronizes the pan/tilt speed to the amount of zoom.

Dinion^{XF}- and Dinion 2X-Dynamic Cameras

The Bosch-High Speed Positioning System comes with a choice of 1/3-inch or 1/2-inch Dinion^{XF} Color or Dinion 2X Day/Night CCDs with 540 TVL resolution, and outstanding sensitivity. The Dinion cameras deliver the highest possible image quality even in the most difficult lighting conditions.

Using 2X-Dynamic technology, pixel-by-pixel analysis provides the user with the most detailed information. Turn on SmartBLC to automatically compensate the image without the need for complicated set-up or compromising dynamic range.

XF-Dynamic

The highly accurate 15-bit (Dinion^{XF} cameras) or 20-bit (Dinion 2X) digital signal is automatically processed to optimally capture the detail in both the high and low light areas of the scene simultaneously, maximizing the information visible in the picture.

NightSense and SensUp

Dinion^{XF} Color cameras feature NightSense which increases sensitivity by 9 dB in monochrome mode. NightSense can be automatically activated in low light situations, or remotely using Bilinx.

Dinion^{XF} and Dinion 2X Day/Night cameras make optimal use of the available lighting by utilizing the built-in SensUp feature. By increasing the integration time on the CCD up to 10 times, the effective sensitivity is dramatically enhanced. This is especially useful when relying only on moonlight for illumination.

Default Shutter

When viewing moving objects a fast shutter speed is required. When using a fast shutter speed the lens opening or gain control needs to be increased to maintain the video signal. The camera sensitivity is limited by the fast shutter speed. The default shutter setting offers the best of all worlds, fast shutter speed as long as there is sufficient light, however as the light level falls, when other adjustments have been exhausted, the shutter reverts to the standard setting maintaining the cameras excellent sensitivity.

Auto Black

The automatic black level feature enhances contrast by compensating for reduced contrast (i.e. glare, fog, mist).

Programmable Modes

Dinion cameras support three independent operating modes. The three modes are preprogrammed for typical applications, but are fully programmable for individual situations. Switching between modes is easy via Bilinx or the external alarm input

Infrared Illumination

The Bosch AEGIS UFLED, the world's first Intelligent-infrared illuminator, combines innovations in infrared technology and design to deliver absolute performance in night vision surveillance.

Constant Light technology compensates for LED degradation, a natural occurrence with all LED-based illuminators, to deliver a constant level of lighting performance throughout the life of the illuminator.

Powered by award-winning 3D-Diffuser technology, Bosch AEGIS UFLED delivers Even-Illumination which lights the foreground and background of the scene eliminating hotspots and underexposure.

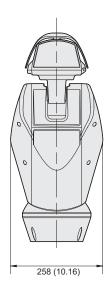
Certifications and Approvals

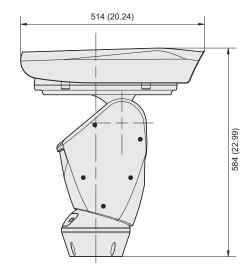
| Safety | acc. to EN 60950 (CE), UL |
|-----------------------|-------------------------------|
| Immunity | acc. to EN 50130-4 (CE) |
| | acc. to EN 55022 Class B (CE) |
| Emission | acc. to EN 61000-3-2 (CE) |
| | acc. to EN 61000-3-3 (CE) |
| Water/dust protection | IP 66 acc. to EN 60529 |

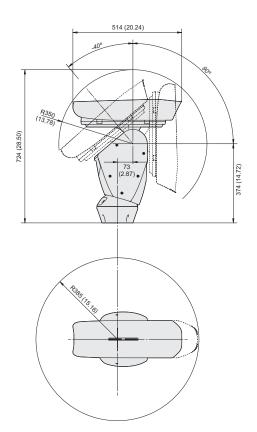
Installation/Configuration Notes

For more information on Dinion cameras (e.g. LTC 0498) and motorized zoom lenses (e.g. LTC 3783/51), please refer to their specific product datasheets.

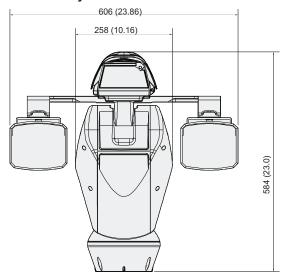
HSPS Standard System Dimensions



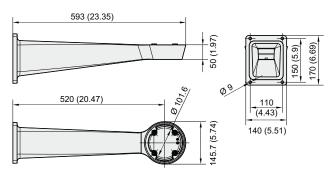




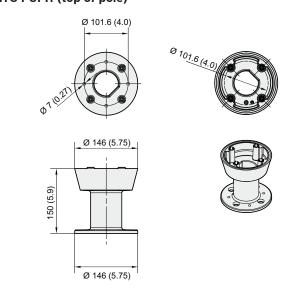
HSPS IR 360 System Dimensions



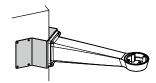
MTC-WUPH

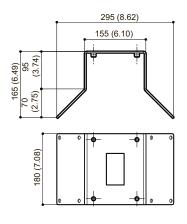


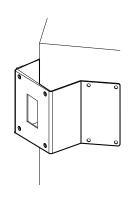
MTC-PUPH (top of pole)

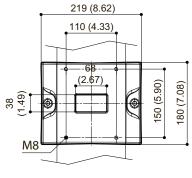


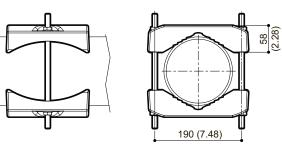
MTC-CORN-W



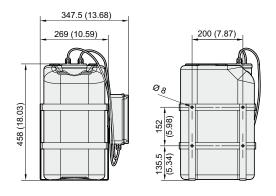






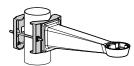


HAC-WAS05



Dimensions-mm (in.)

MTC-POLE-W (side of pole)



Parts Included

Quantity Component

- 1 Main Pan/Tilt System
- 1 Base unit with power supply
- ${\small 1} \\ {\small Pre-assembled Bosch Dinion} {\small XF Color or Dinion 2X Day/Night } \\ {\small camera and motorized zoom lens assembly} \\$
- 1 Mounting kit (optional)
- 1 Illuminator bracket assembly (optional)
- 2 Bosch AEGIS UFLED Infrared Illuminators (optional)
- 1 Serial cable
- 1 Serial adapter
- 1 Installation manual
- 1 Set of mounting accessories
 - 4 mm Allen wrench
 - Bracket with fixing screws
 - Cable ties
 - Tube
 - Label

Technical Specifications

High-Speed Positioning System

Electrical

| Input Voltage | |
|------------------------------|---|
| Standard System | 24 VAC |
| IR 360 System | 24 VAC |
| Power Draw (max.) | |
| Standard System | 5 A |
| IR 360 System | 8 A |
| Input Frequency | 50/60 Hz |
| Integrated Housing Input | Thermostat heater, 24 VAC, 20 W max. |
| Camera Input | 12 VDC, 800 mA |
| Lens Input | +6 to +15 VDC, 200 mA |
| Wiper (optional) Input | 24 VAC, 400 mA |
| Illuminator (optional) Input | 24 VAC, 2 A + 2 A max. |
| Tour Control | Autopan; Preset; Patrol |
| Presets | 250 selectable (max. 99 via keyboard) |
| Preset / Area Names | 20-character string |
| Preset Accuracy | 0.020 |
| Data Set-up | Flash memory |
| Serial | RS-232, Sub-D for firmware upgrade |
| Protocols | Bilinx, Biphase, Pelco-D, and third party protocols on RS-485 |
| Supported Platforms | DiBos, Divar, Allegiant |
| Max. Addressable Units | Bilinx/Biphase: 998 (dipswitch setting) Pelco-D: 255 (dipswitch setting) |
| Firmware Upgrades | RS-232 interface |

| Configuration Modes | Via PC or OSD | | |
|-------------------------------------|--|------------------------|--|
| Configuration Interface | RS-485 | | |
| Mechanical | | | |
| Dimensions (H x W x D) | 584 x 258 x 514 m (23.0 x 10.2 x 20.3 | **** | |
| Weight | Approx. 14 kg (31 | lb) | |
| Mounting | Top mount (OTT) | | |
| Color | Light grey (RAL 70 | 35) | |
| Material | Die cast and extrud | led aluminum, ABS | |
| Rotation | | | |
| Horizontal | 360° continuous | | |
| Vertical | -90° to +40° | -90° to +40° | |
| Speed | Manual | Patrol / Autopan | |
| Horizontal (pan) | | | |
| Standard System | 0.1º to 100º/s | 0.1° to 100°/s | |
| IR 360 System | 0.1° to 40°/s | 0.1° to 40°/s | |
| Vertical (tilt) | | | |
| Standard System | 0.1° to 40°/s | 0.1° to 30°/s | |
| IR 360 System | 0.1º to 30º/s | 0.1° to 30°/s | |
| Static / Dynamic Torque | | | |
| Horizontal | 20 Nm | | |
| Vertical | 20 Nm | | |
| Transmission | Toothed belt | | |
| Environmental | | | |
| Operating Temperature | -20 °C to +50 °C (| -4 °F to +122 °F) | |
| Storage Temperature | -20 °C to +60 °C (| -4 °F to +140 °F) | |
| Humidity | <90% relative hum | idity (non-condensing) | |
| Enclosure Protection | IP 66 | | |
| Camera Speficiations | | | |
| UDII 0405 Carita | | | |

UPH-C485 Series

| Camera Model | LTC 0485 Dinion ^{XF} Color, 1/3-inch Digital CCD Camera | |
|--|--|--|
| Active Pixels | | |
| NTSC | 768 H x 492 V | |
| PAL | 752 H x 582 V | |
| Sensitivity (3200 k) | | |
| Sensitivity (full video) ⁴ | 2.4 lux (0.24 fc) | |
| Sensitivity 50 IRE ⁴ | 0.59 lux / 0.24 lux (NightSense) (0.059 fc / 0.024 fc (NightSense)) | |
| Minimum Illumination ⁴ | 0.24 lux / 0.10 lux (NightSense) (0.024 fc / 0.01 fc (NightSense)) | |
| Minimum Illumina- tion with SensUp | 0.024 lux / 0.010 lux (NightSense) (0.0024 fc / 0.0010 fc (NightSense)) | |
| Horizontal Resolution | 540 TVL | |

| Signal-to-Noise-Ra- tio | > 50 dB |
|------------------------------|--|
| Video Output | 1 Vpp, 75 Ohm |
| Y/C Output | Y: 1 Vpp / C: 0.3 Vpp |
| Synchronization | Internal, Line Lock, HV-lock and genlock (Burst lock) selectable |
| Electronic Shutter | Auto (1/60 [1/50] to 1/500000), fixed, flickerless, default |
| SensUp | Off, automatic continuous up to 10x |
| Auto Black | On, off selectable |
| Range | 32x dynamic range enhancement |
| Dynamic Noise Reduction | Auto, off selectable |
| Contour | Sharpness enhancement level selectable |
| BLC | Off, area and level selectable |
| Gain | Auto (maximum level selectable to 28 dB) or fixed level selectable |
| White Balance | ATW (2500–10000 K), AWB hold, manual WB selectable |
| VMD | Four (4) area, sensitivity selectable |
| Alarm Output | VMD or Bilinx |
| Alarm Input (TTL) | Profile switching, +5 V nominal, +40 VDC max. |
| Alarm Output Relay | Max. 30 VAC or +40 VDC, max. 0.5 A continuous, 10 VA |
| External Synchronal Input | 75 Ohm or High Impedance selectable |
| Cable Compensation | Up to $1000\mathrm{m}$ ($3000\mathrm{ft}$) coax without external amplifiers (automatic set-up in combination with coaxial communication) |
| Camera ID | 16-character editable string, position selectable |
| Remote Control | Bi-directional coaxial communication |
| 4 E4 0 000/ fl+ | Complete Off |

4. F1.2, 89% reflection, SensUp Off

UPH-C498 Series

| Camera Model | LTC 0498 Dinion 2X Day/Night, 1/3-inch Digital CCD Camera |
|---------------|--|
| Active Pixels | |
| NTSC | 768 H x 494 V |
| PAL | 752 H x 582 V |

Sensitivity (3200 K, scene reflectivity 89%, F1.2)

| | Full video | Usable picture | Usable picture |
|--------------|------------|-----------------------|-------------------------|
| | (100 IRE) | (50 IRE) | (30 IRE) |
| Color | 2.4 lx | 0.59 lx | 0.24 lx |
| | (0.24 fc) | (0.059 fc) | (0.024 fc) |
| Color | 0.24 lx | 0.059 lx | 0.024 lx |
| + SensUp 10x | (0.024 fc) | (0.0059 fc) | (0.0024 fc) |
| Monochrome | - | 0.08 lx (0.008 fc) | 0.038 lx (0.0038 fc) |
| Monochrome | - | 0.008 lx | 0.0038 lx |
| + SensUp 10x | | (0.0008 fc) | (0.00038 fc) |

| Horizontal Resolution | 540 TVL |
|--------------------------------|---|
| Signal-to-Noise Ratio | >50 dB |
| Video Output | Composite video 1 Vpp, 75 ohm |
| Synchronization | Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable |
| Shutter | Auto (1/50 [1/60] to 1/10000) selectable Auto (1/50 [1/60] to 1/50000) automatic flickerless, fixed selectable |
| SensUp | Adjustable from Off up to 10x |
| Day/Night | Color, Mono, Auto |
| Auto Black | Automatic continuous, Off |
| Dynamic Engine | XF-Dynamic, 2X-Dynamic, SmartBLC |
| Dynamic Range | 120 dB (20-bit image processing) |
| Dynamic Noise Reduction | Auto, On/off selectable |
| Sharpness | Sharpness enhancement level selectable |
| SmartBLC | On/Off |
| AGC | AGC On/Off (0 dB) selectable |
| Peak White Invert | On/Off |
| White Balance | ATW, ATWhold and manual (2500–10000 K) |
| Alarm Output | VMD or Bilinx |
| Alarm Input (TTL) | Profile switching, +3.3 V nominal, +40 VDC max. |
| Alarm Output Relay | 30 VAC or +40 VDC, max. 0.5 A continuous, 10 VA |
| External Synchronization Input | 75 Ohm or High Impedance selectable |
| Cable Compensation | Up to 1000 m (3000 ft) coax without external amplifiers (automatic set-up in combination with Bilinx coaxial communication) |
| Camera ID | 17-character editable string, position selectable |
| Test Pattern Generator | Color bars 100%, Grayscale 11-step, Sawtooth 2H, Checker board, Cross hatch, UV plane |
| Modes | Six (6) preset programmable modes |
| Remote Control | Bilinx coaxial bi-directional communication |
| Video Motion Detection | One area, fully programmable |
| Controls | OSD with soft-key operation (multi-lingual) |
| IIDH-C610 Sories | |

UPH-C610 Series

| Camera Model | LTC 0610 Dinion ^{XF} Color, 1/2-inch Digital CCD Camera |
|---------------|---|
| Active Pixels | |
| NTSC | 768 H x 492 V |
| PAL | 752 H x 582 V |

PAL

 $752\,H\,x\,582\,V$

| Sensitivity (3200 k) | | Sensitivity (3200 K, scene reflectivity 89%, F1.2) | | | |
|--|--|--|-------------------------------|---|--|
| Sensitivity (full video) ⁵ | 1.4 lx (0.14 fc) | | ull video 100 IRE) | Usable picture (50 IRE) | Usable picture (30 IRE) |
| Sensitivity 50 IRE ⁵ | 0.35 lux / 0.14 lux (NightSense) (0.035 fc / 0.014 fc (NightSense)) | | 4 lx 0.14 fc) | 0.31 lx (0.031 fc) | 0.18 lx (0.018 fc) |
| Minimum Illumination ⁵ | 0.18 lux / 0.08 lux (NightSense) (0.018 fc / 0.008 fc (NightSense)) | | 0.14 lx 0.014 fc) | 0.031 lx (0.0031 fc) | 0.018 lx (0.0018 fc) |
| Minimum Illumination with SensUp | 0.018 lux / 0.008 lux (NightSense) (0.0018 fc / 0.0008 fc (NightSense)) | Monochrome - | | 0.052 lx (0.0052 fc) | 0.024 lx (0.0024 fc) |
| Horizontal Resolution | 540 TVL | Monochrome - | | 0.0052 lx | 0.0024 lx |
| Signal-to-Noise-Ratio | > 50dB | + SensUp 10x | | (0.00052 fc) | (0.00024 fc) |
| Video Output | 1Vpp, 75 Ohm | Horizontal Resolution | 540 T\ | VL | |
| Y/C Output | Y: 1 Vpp / C: 0.3 Vpp | Signal-to-Noise Ratio | >50 dl | В | |
| Synchronization | Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable | Video Output Synchronization | | osite video 1 Vpp, al, Line Lock, HV-k | |
| Shutter | Auto (1/60 [1/50] to 1/500000), fixed, flicker- less, default | Shutter | (Burst | lock) selectable | 10000) selectable |
| Night Sense | Auto, Forced, Off | Shuttel | | | 50000) selectable 50000) automatic |
| SensUp | Off, automatic continuous up to 10x | flickerless, fixed selectable | | ole | |
| Auto Black | On/Off selectable | SensUp | Adjustable from Off up to 10x | | 10x |
| Dynamic Range | 32x dynamic range enhancement | Day/Night | Color, | Color, Mono, Auto | |
| | c- Auto, Off selectable | Auto Black | Automatic continuous, Off | | off |
| tion | Nate, en solstable | Dynamic Engine | XF-Dynamic, SmartBLC | | |
| Contour | Sharpness enhancement level selectable | Dynamic Range | 96 dB | 96 dB (16-bit image processing) | |
| BLC | Off, area and level selectable | Dynamic Noise Reduct | ion Auto, (| Auto, On/Off selectable | |
| Gain | Auto (maximum level selectable to 28 dB) or fixed | Sharpness | Sharpı | Sharpness enhancement level selectable | |
| | level selectable | SmartBLC | On/Of | On/Off | |
| White Balance | ATW (2500–10000 K), AWB hold, manual WB selectable | AGC | AGC O | AGC On/OffOff (0 dB) selectable | |
| VMD | Four (4) area, sensitivity selectable | Peak White Invert | On/Of | f | |
| Alarm Output | VMD or Bilinx | White Balance | ATW, A | ATWhold and man | ual (2500–10000 K) |
| Alarm Input (TTL) | Profile switching, +5 V nominal, +40 VDC max. | Alarm Output | VMD o | VMD or Bilinx | |
| Alarm Output Relay | Max. 30 VAC or +40 VDC, max. 0.5 A continuous, 10 VA | Alarm Input (TTL) | Profile max. | switching, +3.3 V | nominal, +40 VDC |
| External Synchronal | 75 Ohm or High Impedance selectable | Alarm Output Relay | 30 VA 10 VA | $30\mathrm{VAC}$ or +40 VDC, max. $0.5\mathrm{A}$ continuous, $10\mathrm{VA}$ | |
| Input Cable Compensation | • | External Synchronization | on 75 Oh | 75 Ohm or High Impedance selectable | |
| | amplifiers (automatic setup in combination with coaxial communication) | Cable Compensation | nal am | Up to 1000 m (3000 ft) coax without external amplifiers (automatic set-up in combina- | |
| Camera ID | 16-character editable string, position selectable | | tion wi | th Bilinx coaxial co | ommunication) |
| Remote Control 5. F/1.2, 89% reflect | Bi-directional coaxial communication ion, SensUp off | Camera ID | 17-cha ble | aracter editable st | ring, position selecta- |
| UPH-C630 Series | | Test Pattern Generator | | oars 100%, Greys 2H, Checker board | cale 11-step, Saw- I, Cross hatch, UV |
| Camera Model | LTC 0630 Dinion 2X Day/Night, 1/2-inch Digital | Modes | · · | preset programm | able modes |
| A-41 Dt. I | CCD Camera | Remote Control | | | nal communication |
| Active Pixels | 70011 4041 | Video Motion Detection | |) area, fully progr | |
| NTSC | 768 H x 494 V | Controls | | | tion (multi-lingual) |

Controls

OSD with soft-key operation (multi-lingual)

Lens Specifications

| Model L8585 (LTC 3783/5 | 51) | |
|-------------------------|---------------------------------------|--|
| 10x optical | f=8.5 (wide) to 85.0 mm (tele), F1.6 | |
| Angle of view (H) | 31.3° (wide) to 3.3° (tele) | |
| Model L8120 (LTC 3293/3 | 30) | |
| 15x optical | f=8.0 (wide) to 120.0 mm (tele), F1.6 | |
| Angle of view (H) | 32.5° (wide) to 2.3° (tele) | |
| Model L86154 (LTC 3793) | /51) | |
| 18x optical | f=8.6 (wide) to 154.0 mm (tele), F2.5 | |
| Angle of view (H) | 30.5° (wide) to 1.82° (tele) | |
| AEGIS UFLED Illuminator | , , , , , | |

LEDs High-efficiency LED array with current limited integral power circuit Number of LEDs 18 high-efficiency surface mount LEDs 10° , 20° , or 30° Beam Patterns Wavelength 850 nm Power Draw 26 to 45 W (45 W max. power). Power consumption will vary over time due to the infrared illuminator's optical output control which compensates for LED degradation and ambient temperature fluctuations. Input Voltage 12 to 40 VDC or 24 VAC ±30% Temperature Range -50°C to +50°C (-58°F to +122°F) max. on full power Environment IP67 Construction Robust, aluminum construction with acrylic front fascia Weight 1.4 kg (3.1 lb) 152 x 188 x 115 mm (6.0 x 7.4 x 4.5 in.) Dimensions (Single Illuminator) Color Black anodized heat sink with black front fascia Power Cable Supplied with IP67 power connector and 5 m (16.4 ft) of connecting lead.

IR Performance Ranges

Bracket

| Model Combination | Beam Pattern | Achievable Distance ⁶ |
|----------------------------|--------------|----------------------------------|
| UFLED10-8BD UFLED10-8BD | 10° 10° | 267 m (876 ft) |
| UFLED10-8BD UFLED20-8BD | 10° 20° | 230 m (755 ft) |
| UFLED10-8BD UFLED30-8BD | 10° 30° | 218 m (715 ft) |
| UFLED20-8BD UFLED20-8BD | 20° 20° | 180 m (590 ft) |
| UFLED20-8BD UFLED30-8BD | 20° 30° | 168 m (551 ft) |
| UFLED30-8BD UFLED30-8BD | 30° | 132 m (433 ft) |

Wall mount U-bracket supplied

6. Actual illumination distance achieved is dependent on camera and lens characteristics.

| Ordering Information | |
|--|-----------------|
| UPH-C485N-L8120 Camera/Lens Assembly LTC 0485 Dinion ^{XF} 1/3 in. NTSC color camera with an LTC 3293/30 8-120 mm zoom lens | UPH-C485N-L8120 |
| UPH-C485P-L8120 Camera/Lens Assembly LTC 0485 Dinion ^{XF} 1/3 in. PAL color camera with an LTC 3293/30 8-120 mm zoom lens | UPH-C485P-L8120 |
| UPH-C498N-L8120 Camera/Lens Assembly LTC 0498 Dinion 2X 1/3 in. NTSC day/night camera with an LTC 3293/30 8-120 mm zoom lens | UPH-C498N-L8120 |
| JPH-C498P-L8120 Camera/Lens Assembly LTC 0498 Dinion 2X 1/3 in. PAL day/night camera with an LTC 3293/30 8-120 mm | UPH-C498P-L8120 |
| UPH-C610N-L8120 Camera/Lens Assembly LTC 0610 Dinion ^{XF} 1/2 in. NTSC color camera with an LTC 3293/30 8-120 mm zoom lens | UPH-C610N-L8120 |
| UPH-C610P-L8120 Camera/Lens Assembly LTC 0610 Dinion ^{XF} 1/2 in. PAL color camera with an LTC 3293/30 8-120 mm zoom lens | UPH-C610P-L8120 |
| JPH-C630N-L8120 Camera/Lens Assembly TC 0630 Dinion 2X 1/2 in. NTSC day/night Lamera with an LTC 3293/30 8-120 mm oom lens | UPH-C630N-L8120 |
| UPH-C630P-L8120 Camera/Lens Assembly LTC 0630 Dinion 2X 1/2 in. PAL day/night camera with an LTC 3293/30 8-120 mm zoom lens | UPH-C630P-L8120 |
| JPH-C498N-L8585 Camera/Lens Assembly LTC 0498 Dinion 2X 1/3 in. NTSC day/night camera with an LTC 3783/51 8.5-85 mm IR- corrected lens | UPH-C498N-L8585 |
| UPH-C498P-L8585 Camera/Lens Assembly LTC 0498 Dinion 2X 1/3 in. PAL day/night camera with an LTC 3783/51 8.5-85 mm IR-corrected lens | UPH-C498P-L8585 |

| Ordering Information | | Ordering Information | |
|--|----------------------|--|--------------|
| UPH-C630N-L8585 Camera/Lens Assembly LTC 0630 Dinion 2X 1/2 in. NTSC day/night camera with an LTC 3783/51 8.5-85 mm IR- corrected lens | UPH-C630N-L8585 | UPH-HWD-24 Standard High-Speed Positioning System with a wiper, 24 VAC High-performance pan/tilt head, camera housing, telemetry receiver, and wiper, 24 VAC, 50/60 Hz | UPH-HWD-24 |
| UPH-C630P-L8585 Camera/Lens Assembly LTC 0630 Dinion 2X 1/2 in. PAL day/night camera with an LTC 3783/51 8.5-85 mm IR- corrected lens | UPH-C630P-L8585 | UPH-HWDIR-24 IR 360 High-Speed Positioning System with a wiper, 24 VAC High-performance pan/tilt head, camera housing, telemetry receiver, and bracket as- sembly for IR two illuminators, 24 VAC, | UPH-HWDIR-24 |
| UPH-C498N-L86154 Camera/Lens Assembly LTC 0498 Dinion 2X 1/3 in. NTSC day/night camera with an LTC 3793/51 8.6-154 mm IR-corrected zoom lens | UPH-C498N- L86154 | 50/60 Hz MTC-PUPH Outdoor Pole Mount for mounting a UPH series unit to the top of a pole | MTC-PUPH |
| UPH-C498P-L86154 Camera/Lens | UPH-C498P- L86154 | MTC-WUPH Outdoor Wall Mount for UPH series | MTC-WUPH |
| Assembly LTC 0498 Dinion 2X 1/3 in. PAL day/night camera with an LTC 3793/51 8.6-154 mm | | MTC-CORN-W Corner Adapter for MTC-WUPH | MTC-CORN-W |
| IR-corrected zoom lens UPH-C630N-L86154 Camera/Lens | UPH-C630N- L86154 | MTC-POLE-W Pole Adapter for MTC-WUPH for mounting a UPH series unit to the side of a | MTC-POLE-W |
| Assembly | | pole Accessories | |
| LTC 0630 Dinion 2X 1/2 in. NTSC day/night camera with an LTC 3793/51 8.6-154 mm IR-corrected zoom lens | | UFLED 10-8BD AEGIS Illuminator AEGIS Intelligent-IR UFLED illuminator, 10°, | UFLED10-8BD |
| UPH-C630P-L86154 Camera/Lens Assembly LTC 0630 Dinion 2X 1/2 in. PAL day/night camera with an LTC 3793/51 8.6-154 mm | UPH-C630P- L86154 | 850 nm UFLED20-8BD AEGIS Illuminator AEGIS Intelligent-IR UFLED illuminator, 20°, 850 nm | UFLED20-8BD |
| IR-corrected zoom lens UPH-HD-24 Standard High-Speed Positioning System, 24 VAC | UPH-HD-24 | UFLED30-8BD AEGIS Illuminator AEGIS Intelligent-IR UFLED illuminator, 30°, 850 nm | UFLED30-8BD |
| High-performance pan/tilt head, camera housing, telemetry receiver, 24 VAC, 50/60 Hz | | WPTV244300220 4-channel Outdoor Power Supply, 220 VAC Four-channel, 220 VAC input, 24/28 VAC | WPTV24430022 |
| UPH-HD-230 Standard High-Speed Positioning System, 230 VAC High-performance pan/tilt head, camera housing, telemetry receiver, 230 VAC, 50/60 Hz | UPH-HD-230 | output, 12.5 A total output, outdoor WPTV244300UL 4-channel Outdoor Power Supply, 120 VAC Four-channel, 120 VAC input, 24/28 VAC | WPTV244300UL |
| UPH-HWD-230 Standard High-Speed Positioning System with a wiper, 230 VAC High-performance pan/tilt head, camera housing, telemetry receiver, and wiper, 230 VAC, 50 Hz | UPH-HWD-230 | output, 12.5 A total output, outdoor HAC-WAS05-20 24 VAC Washer 24 VAC washer inst. 5M 25L | HAC-WAS05-20 |
| | | HAC-WAS05-50 230 VAC Washer 230 VAC washer inst. 5M 25L | HAC-WAS05-50 |
| UPH-HWD-120 Standard High-Speed Positioning System with a wiper, 120 VAC | UPH-HWD-120 | HAC-WAS30-50 230 VAC Washer 230 VAC washer inst. 30M 25L | HAC-WAS30-50 |
| High-performance pan/tilt head, camera housing, telemetry receiver, and wiper, 120 VAC, 60 Hz | | UFLED-CL-1M Link Cable 1 m (3.3 ft) telemetry link cable for Aegis illuminators | UFLED-CL-1M |

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security,sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa: Bosch Security Systems B.V. P.O. Box 80002 5600 JB Eindhoven, The Netherlands Phone: + 31 40 2577 284 Fax: +31 40 2577 330 emea.securitysystems@bosch.com www.boschsecurity.com

Asia-Pacific: Represented by
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6258 5511
Fax: +65 6571 2698
apr.securitysystems@bosch.com
www.boschsecurity.com