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 2X and Dinion 2X Day/Night 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. Multi-protocol 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® Color Camera, 1/3 in.
498  LTC 0498 Dinion 2X Day/Night Camera, 1/3 in.
610  LTC 0610 Dinion® Color Camera, 1/2 in.
630  LTC 0630 Dinion 2X Day/Night Camera, 1/2 in.

2 Video Format
N  NTSC
P  PAL

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.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPH-HWD-230</td>
<td>• Standard System</td>
</tr>
<tr>
<td></td>
<td>• 230 VAC, 50 Hz Power Supply</td>
</tr>
<tr>
<td>UPH-HWD-230</td>
<td>• Standard System</td>
</tr>
<tr>
<td></td>
<td>• Wiper</td>
</tr>
<tr>
<td></td>
<td>• 230 VAC, 50 Hz Power Supply</td>
</tr>
<tr>
<td>UPH-HWD-120</td>
<td>• Standard System</td>
</tr>
<tr>
<td></td>
<td>• Wiper</td>
</tr>
<tr>
<td></td>
<td>• 120 VAC, 60 Hz Power Supply</td>
</tr>
<tr>
<td>UPH-HD-24</td>
<td>• Standard System</td>
</tr>
<tr>
<td>UPH-HWD-24</td>
<td>• Standard System</td>
</tr>
<tr>
<td></td>
<td>• Wiper</td>
</tr>
<tr>
<td></td>
<td>• 24 VAC, 50/60 Hz Power Supply</td>
</tr>
</tbody>
</table>

Module C: Mounts
Choose an optional mounting solution for the Standard or for the IR 360 System.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTC-PUPH</td>
<td>Top of pole mount</td>
</tr>
<tr>
<td>MTC-WUWH</td>
<td>Wall mount</td>
</tr>
<tr>
<td>MTC-CORN-W</td>
<td>Corner adapter for wall mount</td>
</tr>
<tr>
<td>MTC-POLE-W</td>
<td>Side of pole adapter for wall mount</td>
</tr>
</tbody>
</table>

Module D: Illuminators
Choose two (2) optional Bosch AEGIS UFLED Intelligent Infrared Illuminators.¹,²,³

<table>
<thead>
<tr>
<th>Suggested Models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UFLED10-8BD</td>
<td>10°, 850 nm</td>
</tr>
<tr>
<td>UFLED20-8BD</td>
<td>20°, 850 nm</td>
</tr>
<tr>
<td>UFLED30-8BD</td>
<td>30°, 850 nm</td>
</tr>
</tbody>
</table>

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\textsuperscript{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\textsuperscript{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\textsuperscript{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\textsuperscript{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\textsuperscript{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

<table>
<thead>
<tr>
<th>Category</th>
<th>Standard/Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>acc. to EN 60950 (CE), UL</td>
</tr>
<tr>
<td>Immunity</td>
<td>acc. to EN 50130-4 (CE)</td>
</tr>
<tr>
<td>Immunity</td>
<td>acc. to EN 55022 Class B (CE)</td>
</tr>
<tr>
<td>Emission</td>
<td>acc. to EN 61000-3-2 (CE)</td>
</tr>
<tr>
<td>Emission</td>
<td>acc. to EN 61000-3-3 (CE)</td>
</tr>
<tr>
<td>Water/dust protection</td>
<td>IP 66 acc. to EN 60529</td>
</tr>
</tbody>
</table>

### 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
### Parts included

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Main Pan/Tilt System</td>
</tr>
<tr>
<td>1</td>
<td>Base unit with power supply</td>
</tr>
<tr>
<td>1</td>
<td>Pre-assembled Bosch Dinion(^\circ) Color or Dinion 2X Day/Night camera and motorized zoom lens assembly</td>
</tr>
<tr>
<td>1</td>
<td>Mounting kit (optional)</td>
</tr>
<tr>
<td>1</td>
<td>Illuminator bracket assembly (optional)</td>
</tr>
<tr>
<td>2</td>
<td>Bosch AEGIS UFLED Infrared Illuminators (optional)</td>
</tr>
<tr>
<td>1</td>
<td>Serial cable</td>
</tr>
<tr>
<td>1</td>
<td>Serial adapter</td>
</tr>
<tr>
<td>1</td>
<td>Installation manual</td>
</tr>
<tr>
<td>1</td>
<td>Set of mounting accessories</td>
</tr>
</tbody>
</table>

- 4 mm Allen wrench
- Bracket with fixing screws
- Cable ties
- Tube
- Label

### Technical specifications

#### High-Speed Positioning System

**Electrical**

<table>
<thead>
<tr>
<th></th>
<th>Standard System</th>
<th>IR 360 System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Voltage</strong></td>
<td>24 VAC</td>
<td>24 VAC</td>
</tr>
<tr>
<td><strong>Power Draw (max.)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard System</td>
<td>5 A</td>
<td></td>
</tr>
<tr>
<td>IR 360 System</td>
<td>8 A</td>
<td></td>
</tr>
<tr>
<td><strong>Input Frequency</strong></td>
<td>50/60 Hz</td>
<td></td>
</tr>
</tbody>
</table>
### 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
- 0.02º

### Data Set-up
- Flash memory

### Serial
- RS-232, Sub-D for firmware upgrade

### Protocols
- Blinx, Biphase, Pelco-D, and third party protocols on RS-485

### Supported Platforms
- DiBos, Divar, Allegiant

### Max. Addressable Units
- Blinx/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 mm (23.0 x 10.2 x 20.2 in.)

#### Weight
- Approx. 14 kg (31 lb)

#### Mounting
- Top mount (OTT)

#### Color
- Light grey (RAL 7035)

#### Material
- Die cast and extruded aluminum, ABS

#### Rotation
- Horizontal: 360º continuous
- Vertical: –90º to +40º

#### Speed
- Manual
- Patrol / Autopan

- **Horizontal (pan)**
  - Standard System: 0.1º to 100º/s
  - IR 360 System: 0.1º to 40º/s

- **Vertical (tilt)**
  - Standard System: 0.1º to 40º/s
  - IR 360 System: 0.1º to 30º/s

#### Static / Dynamic Torque
- Horizontal: 20 Nm
- Vertical: 20 Nm

### Transmission
- Toothed belt

### Environmental

#### Operating Temperature
- –20 ºC to +50 ºC (–4 ºF to +122 ºF)

#### Storage Temperature
- –20 ºC to +60 ºC (–4 ºF to +140 ºF)

#### Humidity
- <90% relative humidity (non-condensing)

#### Enclosure Protection
- IP 66

### Camera Specifications

#### UPH-C485 Series

<table>
<thead>
<tr>
<th>Camera Model</th>
<th>LTC 0485 Dinion® Color, 1/3-inch Digital CCD Camera</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Pixels</strong></td>
<td>NTSC: 768 H x 492 V</td>
</tr>
<tr>
<td></td>
<td>PAL: 752 H x 582 V</td>
</tr>
<tr>
<td><strong>Sensitivity (3200 k)</strong></td>
<td></td>
</tr>
<tr>
<td>Sensitivity (full video)(^4)</td>
<td>2.4 lux (0.24 fc)</td>
</tr>
<tr>
<td>Sensitivity 50 IRE(^4)</td>
<td>0.59 lux / 0.24 lux (NightSense) (0.059 fc / 0.24 fc (NightSense))</td>
</tr>
<tr>
<td>Minimum Illumination(^4)</td>
<td>0.24 lux / 0.10 lux (NightSense) (0.024 fc / 0.01 fc (NightSense))</td>
</tr>
<tr>
<td>Minimum Illumination with SensUp</td>
<td>0.024 lux / 0.010 lux (NightSense) (0.0024 fc / 0.0010 fc (NightSense))</td>
</tr>
<tr>
<td><strong>Horizontal Resolution</strong></td>
<td>540 TVL</td>
</tr>
<tr>
<td><strong>Signal-to-Noise-Ratio</strong></td>
<td>&gt; 50 dB</td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>1 Vpp, 75 Ohm</td>
</tr>
<tr>
<td><strong>Y/C Output</strong></td>
<td>Y: 1 Vpp / C: 0.3 Vpp</td>
</tr>
<tr>
<td><strong>Synchronization</strong></td>
<td>Internal, Line Lock, HV-lock and genlock (Burst lock) selectable</td>
</tr>
<tr>
<td><strong>Electronic Shutter</strong></td>
<td>Auto (1/60 [1/50] to 1/500000), fixed, flickerless, default</td>
</tr>
<tr>
<td><strong>SensUp</strong></td>
<td>Off, automatic continuous up to 10x</td>
</tr>
<tr>
<td><strong>Auto Black</strong></td>
<td>On, off selectable</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>32x dynamic range enhancement</td>
</tr>
<tr>
<td><strong>Dynamic Noise Reduction</strong></td>
<td>Auto, off selectable</td>
</tr>
<tr>
<td><strong>Contour</strong></td>
<td>Sharpness enhancement level selectable</td>
</tr>
<tr>
<td><strong>BLC</strong></td>
<td>Off, area and level selectable</td>
</tr>
</tbody>
</table>
### UPH-C498 Series

<table>
<thead>
<tr>
<th>Camera Model</th>
<th>LTC 0498 Dinion 2X Day/Night, 1/3-inch Digital CCD Camera</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Pixels</strong></td>
<td></td>
</tr>
<tr>
<td>NTSC</td>
<td>768 H x 494 V</td>
</tr>
<tr>
<td>PAL</td>
<td>752 H x 582 V</td>
</tr>
<tr>
<td><strong>Sensitivity</strong> (3200 k, scene reflectivity 89%, F1.2)</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>2.4 lx (0.24 fc)</td>
</tr>
<tr>
<td>Color + SensUp 10x</td>
<td>0.24 lx (0.024 fc)</td>
</tr>
<tr>
<td>Monochrome</td>
<td>-</td>
</tr>
<tr>
<td>Monochrome + SensUp 10x</td>
<td>-</td>
</tr>
<tr>
<td><strong>Horizontal Resolution</strong></td>
<td>540 TVL</td>
</tr>
<tr>
<td><strong>Signal-to-Noise Ratio</strong></td>
<td>&gt;50 dB</td>
</tr>
<tr>
<td><strong>Video Output</strong></td>
<td>Composite video 1 Vpp, 75 ohm</td>
</tr>
<tr>
<td><strong>Synchronization</strong></td>
<td>Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable</td>
</tr>
<tr>
<td><strong>Shutter</strong></td>
<td>Auto (1/50 [1/60] to 1/10000) selectable</td>
</tr>
<tr>
<td></td>
<td>Auto (1/50 [1/60] to 1/50000) automatic flickerless, fixed selectable</td>
</tr>
<tr>
<td><strong>SensUp</strong></td>
<td>Adjustable from Off up to 10x</td>
</tr>
</tbody>
</table>

### Day/Night

<table>
<thead>
<tr>
<th>Color, Mono, Auto</th>
</tr>
</thead>
</table>

### Auto Black

<table>
<thead>
<tr>
<th>Automatic continuous, Off</th>
</tr>
</thead>
</table>

### Dynamic Engine

<table>
<thead>
<tr>
<th>XF-Dynamic, 2X-Dynamic, SmartBLC</th>
</tr>
</thead>
</table>

### 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 Relay

30 VAC or +40 VDC, max. 0.5 A continuous, 10 VA

### External Synchronization Input

75 Ohm or High Impedance selectable

### 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)

### UPH-C610 Series

<table>
<thead>
<tr>
<th>Camera Model</th>
<th>LTC 0610 Dinion® Color, 1/2-inch Digital CCD Camera</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Pixels</strong></td>
<td></td>
</tr>
<tr>
<td>NTSC</td>
<td>768 H x 492 V</td>
</tr>
<tr>
<td>PAL</td>
<td>752 H x 582 V</td>
</tr>
<tr>
<td><strong>Sensitivity</strong> (3200 k)</td>
<td></td>
</tr>
<tr>
<td>Sensitivity (full video)®</td>
<td>1.4 lx (0.14 fc)</td>
</tr>
<tr>
<td>Sensitivity 50 IRE®</td>
<td>0.35 lux / 0.14 lux (NightSense) (0.035 fc / 0.014 fc (NightSense))</td>
</tr>
</tbody>
</table>
Minimum Illumination
0.18 lux / 0.08 lux (NightSense) (0.018 fc / 0.008 fc (NightSense))

Minimum Illumination with SensUp
0.018 lux / 0.008 lux (NightSense) (0.0018 fc / 0.0008 fc (NightSense))

Horizontal Resolution
540 TVL

Signal-to-Noise-Ratio
> 50dB

Video Output
1Vpp, 75 Ohm

Y/C Output
Y: 1 Vpp / C: 0.3 Vpp

Synchronization
Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable

Shutter
Auto (1/60 [1/50] to 1/500000), fixed, flickerless, default

Night Sense
Auto, Forced, Off

SensUp
Off, automatic continuous up to 10x

Auto Black
On/Off selectable

Dynamic 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 m (3000 ft) coax without external amplifiers (automatic setup in combination with coaxial communication)

Camera ID
16-character editable string, position selectable

Remote Control
Bi-directional coaxial communication

5. F/1.2, 85% reflection, SensUp off

UPH-C630 Series

Camera Model
LTC 0630 Dinion 2X Day/Night, 1/2-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)

<table>
<thead>
<tr>
<th></th>
<th>Full video (100 IRE)</th>
<th>Usable picture (50 IRE)</th>
<th>Usable picture (30 IRE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>1.4 lx (0.14 fc)</td>
<td>0.31 lx (0.031 fc)</td>
<td>0.18 lx (0.018 fc)</td>
</tr>
<tr>
<td>Color + SensUp 10x</td>
<td>0.14 lx (0.014 fc)</td>
<td>0.031 lx (0.0031 fc)</td>
<td>0.018 lx (0.0018 fc)</td>
</tr>
<tr>
<td>Monochrome</td>
<td>-</td>
<td>0.052 lx (0.0052 fc)</td>
<td>0.024 lx (0.0024 fc)</td>
</tr>
<tr>
<td>Monochrome + SensUp 10x</td>
<td>-</td>
<td>0.0052 lx (0.00052 fc)</td>
<td>0.0024 lx (0.00024 fc)</td>
</tr>
</tbody>
</table>

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, SmartBLC

Dynamic Range
96 db (16-bit image processing)

Dynamic Noise Reduction
Auto, On/Off selectable

Sharpness
Sharpness enhancement level selectable

SmartBLC
On/Off

AGC
AGC On/OffOff (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
Max. 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%, Greyscale 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 (1) area, fully programmable

Controls
OSD with soft-key operation (multi-lingual)

Lens Specifications

Model L8585 (LTC 3783/51)
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 3293/30)
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 Specifications

LEDs
High-efficiency LED array with current limited integral power circuit

Number of LEDs
18 high-efficiency surface mount LEDs

Beam Patterns
10°, 20°, or 30°

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)

Dimensions (Single Illuminator)
152 x 188 x 115 mm (6.0 x 7.4 x 4.5 in.)

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.

Bracket
Wall mount U-bracket supplied

IR Performance Ranges

<table>
<thead>
<tr>
<th>Model Combination</th>
<th>Beam Pattern</th>
<th>Achievable Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>UFLED10-8BD, UFLED10-8BD</td>
<td>10°, 10°</td>
<td>267 m (876 ft)</td>
</tr>
<tr>
<td>UFLED10-8BD, UFLED20-8BD</td>
<td>10°, 20°</td>
<td>230 m (755 ft)</td>
</tr>
<tr>
<td>UFLED10-8BD, UFLED30-8BD</td>
<td>10°, 30°</td>
<td>218 m (715 ft)</td>
</tr>
<tr>
<td>UFLED20-8BD, UFLED20-8BD</td>
<td>20°, 20°</td>
<td>180 m (590 ft)</td>
</tr>
<tr>
<td>UFLED20-8BD, UFLED30-8BD</td>
<td>20°, 30°</td>
<td>168 m (551 ft)</td>
</tr>
<tr>
<td>UFLED30-8BD, UFLED30-8BD</td>
<td>30°, 30°</td>
<td>132 m (433 ft)</td>
</tr>
</tbody>
</table>

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

Ordering information

UPH-C485N-L8120 Camera/Lens Assembly
LTC 0485 Dinion® 1/3 in. NTSC color camera with an LTC 3293/30 8-120 mm zoom lens
Order number UPH-C485N-L8120

UPH-C485P-L8120 Camera/Lens Assembly
LTC 0485 Dinion® 1/3 in. PAL color camera with an LTC 3293/30 8-120 mm zoom lens
Order number 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
Order number UPH-C498N-L8120

UPH-C498P-L8120 Camera/Lens Assembly
LTC 0498 Dinion 2X 1/3 in. PAL day/night camera with an LTC 3293/30 8-120 mm zoom lens
Order number UPH-C498P-L8120

UPH-C610N-L8120 Camera/Lens Assembly
LTC 0610 Dinion® 1/2 in. NTSC color camera with an LTC 3293/30 8-120 mm zoom lens
Order number UPH-C610N-L8120

UPH-C610P-L8120 Camera/Lens Assembly
LTC 0610 Dinion® 1/2 in. PAL color camera with an LTC 3293/30 8-120 mm zoom lens
Order number UPH-C610P-L8120
UPH-C630N-L8120 Camera/Lens Assembly
LTC 0630 Dinion 2X 1/2 in. NTSC day/night camera with an LTC 3293/30 8-120 mm zoom lens
Order number 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
Order number UPH-C630P-L8120

UPH-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
Order number 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
Order number UPH-C498P-L8585

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
Order number UPH-C630N-L8585

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
Order number UPH-C630P-L8585

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
Order number UPH-C498N-L86154

UPH-C498P-L86154 Camera/Lens Assembly
LTC 0498 Dinion 2X 1/3 in. PAL day/night camera with an LTC 3793/51 8.6-154 mm IR-corrected zoom lens
Order number UPH-C498P-L86154

UPH-C630N-L86154 Camera/Lens Assembly
LTC 0630 Dinion 2X 1/2 in. NTSC day/night camera with an LTC 3793/51 8.6-154 mm IR-corrected zoom lens
Order number UPH-C630N-L86154

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 IR-corrected zoom lens
Order number UPH-C630P-L86154

UPH-HD-230 Standard High-Speed Positioning System, 230 VAC
High-performance pan/tilt head, camera housing, telemetry receiver, 230 VAC, 50/60 Hz
Order number UPH-HD-230

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
Order number UPH-HWD-230

UPH-HWD-120 Standard High-Speed Positioning System with a wiper, 120 VAC
High-performance pan/tilt head, camera housing, telemetry receiver, and wiper, 120 VAC, 60 Hz
Order number UPH-HWD-120

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
Order number UPH-HWD-24

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 assembly for IR two illuminators, 24 VAC, 50/60 Hz
Order number UPH-HWDIR-24

MTC-PUPH Outdoor Pole Mount
for mounting a UPH series unit to the top of a pole
Order number MTC-PUPH

MTC-WUPH Outdoor Wall Mount
for UPH series
Order number MTC-WUPH

MTC-CORN-W Corner Adapter for MTC-WUPH
Order number MTC-CORN-W

MTC-POLE-W Pole Adapter for MTC-WUPH
for mounting a UPH series unit to the side of a pole
Order number MTC-POLE-W

Accessories
UFLED10-8BD AEGIS Illuminator
Intelligent-IR 850 nm illuminator. IP67; LED array; Constant Light technology; 3D Diffuser; black; 40 m HFOV; 220 m distance; 10º beam pattern
Order number UFLED10-8BD

UFLED20-8BD AEGIS Illuminator
Intelligent-IR 850 nm illuminator. IP67; LED array; Constant Light technology; 3D Diffuser; black; 55 m HFOV; 150 m distance; 20º beam pattern
Order number UFLED20-8BD
### UFLED30-8BD AEGIS Illuminator
Intelligent-IR 850 nm illuminator. IP67; LED array; Constant Light technology; 3D Diffuser; black; 60 m HFOV; 110 m distance; 30º beam pattern
Order number UFLED30-8BD

### WPTV244300UL 4-channel Outdoor Power Supply, 120 VAC
Four-channel, 120 VAC input, 24/28 VAC output, 12.5 A total output, outdoor
Order number WPTV244300UL

### WPTV244300220 4-channel Outdoor Power Supply, 220 VAC
Four-channel, 220 VAC input, 24/28 VAC output, 12.5 A total output, outdoor
Order number WPTV244300220

### UFLED-CL-1M Link Cable
1 m (3.3 ft) telemetry link cable for Aegis illuminators
Order number UFLED-CL-1M

---

**Represented by:**

**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
5617 BA Eindhoven, The Netherlands
Phone: +31 40 2577 384
Fax: +31 40 2577 330
eur.security@bosch.com
www.boschsecurity.com

**Asia-Pacific:**
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.security@bosch.com
www.boschsecurity.asia

**China:**
Bosch (Shanghai) Security Systems Ltd.
251 Building, No. 333 Fuquan Road
North IBP
Changning District, Shanghai
200335 China
Phone: +86 21 22181111
Fax: +86 21 22182398
www.boschsecurity.com.cn

**America Latina:**
Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.security@bosch.com
www.boschsecurity.com