### **Key Points**



#### **Independent Camera Setup**

Camera setup such as AWE, WB and etc can be configured on each preset view. Target spot in different distance and illumination can be watched with most preferred setup.



#### Micro-Step Technology

Due to the Micro-stepping technology, one step angle is divided by 256. Accordingly, high accuracy as well as ultra low sound noise (under 60dB) can be achieved. Micro-stepping technology enables ultra low speed down to 0.05°/s for high zoom operations.



#### **Vector Driving**

Utilizing Vector drive technology, Pan and Tilt motion is done with simultaneous and harmonious manner.



All housing is designed to withstand rugged environments. Aluminum die -casting enclosure and Poly Carbonate clear dome enables stable 24hours security tasks.



#### Weather Proof Design

Due to IP66 environment protection as well as built-in Fan & Heater, speed dome camera will serve you all the time regardless of rain, snow and storm.



#### **Telemetry and Control**

RTC (Real Time Clock) and Accurate Semiconductor Temperature sensor is deployed to measure the environment of the site of interest. Also, this measurement is displayed on OSD as well as used for Fan heater control.



#### **Schedule Function**

Owing to the RTC, functions such as Preset, Scan, Group, Pattern can be organized to predefined schedule. The Schedule is described by day, hour and min.



#### **Quick installations and Maintenance**

Neat terminals and DIP switches in the wall mount Junction box make the cabling easy and simple. Also, Owing to modular design, camera drive block is quick attachable for easy maintenance.



#### **Main Feature**

#### **Fast & Silent Motion**

- Extremely guiet and low vibration
- Shortest Path by Vector Drive Technology
- High Accuracy with Micro-Stepping Control Technology
- Adaptive Pan Tilt speed to Zoom ratio
- Lightning Speed (MAX. 380°/sec) & Smooth Manual Speed (MIN. 0.05°/sec)
- Endless 360° Pan Rotation

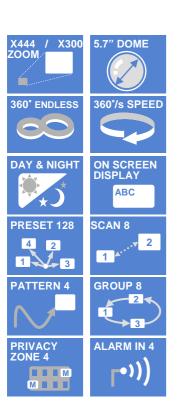
#### **Superior Zoom Camera**

- QSD-P 37: X444 Zoom Control (Optical X37, Digital X12)
- QSD-P30 : X300 Zoom Control (Optical X30, Digital X10)
- Day & Night (IR Cut Filter)

#### **Powerful Functions**

- Independent Camera Setup (AE, WB and etc.)
- 128 Preset Positions with Alphanumeric Labels
- 4 Pattern, 8 Scan and 8 Group Functions
- 4 Privacy Zones (Spherical Coordinates)
- 7 Rules for Schedule function based on Day and Time
- Auto Flip, Auto Parking, Power-up Action
- Freeze in Preset Function
- On-Screen Display of Real time and Temperature
- Built-in 8 Sensor Inputs and 4 Relay Output
- Vandal-Proof (Dome Cover: PC / Housing & Accessories: AL Die-cast)





# Specifications

## Spec. Data

Model		QSD-N30	QSD-P30	
	Signal Format	NTSC	PAL	
	Image Device	1/4" Vertical double density interline CCD		
	Total Pixel	410K Pixels [811(H) x 508(V)]	470K Pixels [795(H) x 596(V)]	
	Effective Pixel	380K Pixels [768(H) x 494(V)]	440K Pixels [752(H) x 582(V)]	
H. Resolution S/N Ratio Zoom Focal Length Angle of View		520 TV Lines (Min.): Color / 570 TV Lines (Min.): B/W		
		50dB (AGC Off, Weight ON)		
		X30 Optical Zoom and X10 Digital Zoom		
		F1.6(W) 3.2(T) f=3.3~99.0mm		
		H : Appr. 58.0° (Wide) to 2.22° (Tele) V : Appr. 44.8° (Wide) to 1.68° (Tele)		
Camera	MIN. Illuminance	0.4 Lux/F1.6 (50 IRE) ; Color / 0.08 Lux/F1.6 (50 IRE) ; B/W		
	Day & Night	Auto / MANUAL (ICR)		
	Focus	Auto / Manual		
	Iris	Auto / Manual		
	Shutter Speed	AUTO / MANUAL , Sens-up and Sens-up Limit is selectable X128 ~ 1/60sec ~ 1/120,000sec X128 ~ 1/50sec ~ 1/120,000sec		
	Gain Control	Low, Middle, High, Off Selectable		
	White Balance	ATW / AWC / Manual $(1800^{\circ} \text{ K} \sim 10,500^{\circ} \text{ K})$		
	WDR	52dB		
	SSNR	Low, Middle, High, Off Selectable		
	Video Out	CVBS: 1.0 V <sub>p-p</sub> / 75 Ω		
Pan/Tilt		Pan : 360°	(Endless)	
	Range		On), 95° (Auto-Flip Off)	
		, ,	360° / sec	
	Pan/Tilt Speed			
	r any rint opeed	Manual: 0.05° ~ 200° / sec (Inversely Proportional to Zoom)  Scan: 1° ~ 180° / sec		
	Preset	127 Presets with Labels / Independent Camera Setup		
	Pattern	4 Patterns, 1000 Commands (About 5Minute)/Patten		
	Scan	8 Scans		
	Group	8 Groups (MAX. 20 Entries for Each Group)		
	Schedule	7 Rules (Condition: Day, Time → Action: Preset, Scan, Group, Pattern)		
	Other Functions	· · · · · · · · · · · · · · · · · · ·	-	
	Communication	Image Auto Flip, Auto Parking, Power-up Action & etc. RS-485		
General	Protocol			
	Privacy Zone	Auto, Pelco-D, Pelco-P, Samsung Selectable  8 Zones		
	Sensor In/Out	Built-in 8 Input / 4 Relay Output		
	OSD	Selective On / Off		
	Power	Temperature, Day and Date & Time Display AC Type : 24V $\pm$ 10%		
		Dome: Φ146		
	Dimension	Housing (Including Wall Mount Bracket): 405(L) x 463.6 (H) x 260 (W)		
	Weight	Approx. 2.5 Kg		
	Operating Temp.	-30° C ~ 50° C / -22° F ~ 122° F		
	Outdoor Housins	IP 66/ Vandal	Proof Structure	
	Outdoor Housing	(Housing & Accessories : Al	Die-cast Dome Cover: PC)	

# Specifications

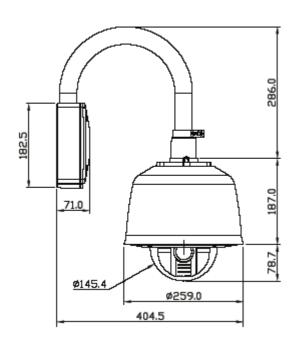
## Spec. Data

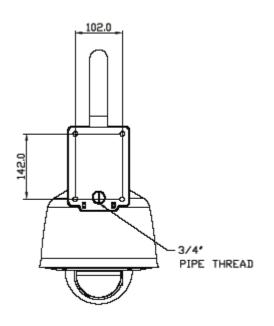
Model		QSD-N37	QSD-P37	
	Signal Format	NTSC	PAL	
	Image Device	1/4" Double Density Interline Transfer CCD		
	Total Pixel	410K Pixels [811(H) x 508(V)]	470K Pixels [795(H) x 596(V)]	
	Effective Pixel	380K Pixels [768(H) x 494(V)]	440K Pixels [752(H) x 582(V)]	
	H. Resolution	550 TV Lines (Min.): Color / 680 TV Lines (Min.): B/W		
S/N Ratio Zoom		50dB (AGC Off, Weight ON)		
		X37 Optical Zoom and X12 Digital Zoom		
	Focal Length	F1.6(W) 3.9(T) f=3.5 ~ 129.5mm		
Camera	Angle of View	H : Appr. 55.5° (Wide) to 1.59° (Tele) V : Appr. 42.5° (Wide) to 1.19° (Tele)		
	MIN. Illuminance	0.7 Lux/F1.6 (50 IRE); Color / 0.06 Lux/F1.6 (50 IRE); B/W		
	Day & Night	Auto / Color / BW / EXT		
	Focus	Auto / Manual / One-Push		
	Iris	Auto / Manual		
	Shutter Speed	AUTO / MANUAL / A.FLK		
	Gain Control	Low / Middle / High / Manual / Off		
	White Balance	ATW / AWC / Manual / Indoor /Outdoor		
	Backlight	WDR / BLC / HLC / OFF		
	SSNR	Low / Middle / High / Off		
	Video Out	CVBS: 1.0 V <sub>p-p</sub> / 75 Ω		
Pan/Tilt	Pange	Pan : 360° (Endless)		
	Range	Tilt: 180° (Auto-Flip On), 95° (Auto-Flip Off)		
		Preset: 360° / sec		
	Pan/Tilt Speed	Manual : 0.05° ~ 200° / sec (Inversely Proportional to Zoom) Scan : 1° ~ 180° / sec		
	Preset	127 Presets with Labels / Independent Camera Setup		
	Pattern	4 Patterns, 1000 Commands (About 5Minute)/Patten		
	Scan	8 Scans		
	Group	8 Groups (MAX. 20 Entries for Each Group)		
	Schedule	7 Rules (Condition: Day, Time → Action: Preset, Scan, Group, Pattern)		
	Other Functions	Image Auto Flip, Auto Parking, Power-up Action & etc.		
General	Communication	RS-485		
	Protocol	Auto, Pelco-D, Pelco-P, Samsung Selectable		
	Privacy Zone	8 Zones		
	Sensor In/Out	Built-in 8 Input / 4 Relay Output		
	OSD	Selective On / Off Temperature, Day and Date & Time Display		
	Power	AC Type : 24V $\pm$ 10%		
	Dimension	Dome: Ф146 Housing (Including Wall Mount Bracket): 405(L) x 463.6 (H) x 260 (W)		
	Weight	Approx. 2.5 Kg		
	Operating Temp.	-30° C ~ 50° C / -22° F ~ 122° F		
	- Foram. 9 1 ombi			
	Outdoor Housing	IP 66/ Vandal Proof Structure (Housing & Accessories : AL Die-cast, Dome Cover: PC)		

## Dimensions & Options

#### Dimensions

### Wall Mount Bracket





### Ceiling Mount Bracket

