

# PHOTON CLASS (w/o modules)

**Class and Type:** *Photon-Class Fast Surveyor*  
**Commissioning Date:** 2372

## HULL SYSTEMS

### Size: 3

Length: 81.50 meters  
 Beam: 42 meters  
 Height: 16.80 meters  
 Decks: 4  
 Mass: 53,249 metric tons  
 SU s available: 1,000  
 SU s used: 915

### HULL

Outer 12  
 Inner 12

### RESISTANCE

Outer Hull: 6  
 Inner Hull: 6

### STRUCTURAL INTEGRITY FIELD

Main: Class 3 (Protection 60/90) 21  
 [1 Power / 10 Protection / round]  
 Backup: Class 3 (Protection 30) 11  
 [1 Power / 10 Protection / round]

### SPECIALIZED HULL:

Atmospheric Capability 3  
 Planetfall Ability 3

## PERSONNEL SYSTEMS

**Crew / Passengers / Evac:** 6 / 6 / 120

### CREW QUARTERS

Spartan: None  
 Basic: 12 2  
 Expanded: None  
 Luxury: None  
 Unusual: None

### ENVIROMENTAL SYSTEMS

Basic Life Support [3 Power / round] 12  
 Reserve Life Support [2 Power / round] 6  
 Emergency Life Support 6  
 Gravity [2 Powers / round] 3  
 Consumables: 1 year worth 3  
 Food Replicators [3 Power / round] 3  
 Industrial Replicators 3  
 Type: Network of small replicators [2 Power/round]  
 Medical Facility: 3 (+1) [3 Power / round] 15  
 Recreation Facilities: 2 [4 Power / round] 16  
 Personnel Transport: Jeffries tubes, antigrav-shaft 3  
 Fire Suppression System [1 Power / round] 3  
 Cargo Holds: 500 cubic meters 1  
 Locations: 2 on Deck 3, Deck 4  
 Escape Pods 1  
 Number: 6

## PROPULSION SYSTEMS

### WARP DRIVE

Nacelles: Type 8 138  
 Speed: 8.4/9.9/9.982 [1 Power/.2 warp speed]  
 Special Configuration: Variable Geometry 5  
 (-2 Power for Sustained / Maximum)  
 PIS: Type J (48 hours of Maximum Warp) 20  
 Upratings  
 Typ 4 (+0.4 to standard) 8  
 Typ 3 (+0.3 to sustained) 6  
 Typ 1 (+0.1 to maximum) 2

### IMPULSE SYSTEMS

Type: 5 (0.8c/0.95c) [7/9 Power / round] 25  
 Location: Deck 3, port and starboard  
 Acceleration Uprating: Class Gamma [100%]  
 [1 Power / round when active] 8  
 Reaction Control System (.025c) 3  
 [2 Power / round when in use]  
 Impulse Thrusters 6  
 (+0.1/+0.05 to Impulse Speed)

## POWER SYSTEMS

### WARP ENGINE

Type: Class 6/K (generates 349 Power/round) 75  
 Location: Deck 3, Deck 4  
 Impulse Engine: Class 5 (generate 40 power/round)  
 Auxilliary Power: 1 reactor (gen. 5 Power/round) 3  
 Emergency Power: Type A (gen. 25 Power/round) 25  
 EPS: Standard Power flow, +100 Power transfer 25

**Standard Usable Power: 389**

## OPERATIONS SYSTEMS

**Bridge: Saucer section dorsal 15**

### COMPUTERS (BIO-NEURAL):

Core 1: Deck 2, port [5 Power / round] 9  
 Core 2: Deck 2, starboard [5 Power / round] 9  
 Uprating: Class Beta (+2)  
 [2 Power / Computer / round] 4  
 ODN 9

### Navigational Deflector [5 Power / round]

12  
 Range 10/20,000/50,000/150,000  
 Accuracy 5/6/8/11  
 Location: Forward ventral, Deck 4  
 Auxiliary Deflector: Forward Deck 1 3



## SENSOR SYSTEMS

Long Range Sensors [5 Power / round]	46
Range Package: Type 6 (Accuracy 3/4/7/10)	
High-Resolution: 5 light-years	
Low-Resolution: 16 light-years	
Strength Package: Class 8 (Strength 8)	
Gain Package: Class Beta (+2)	
Coverage: standard	
Lateral Sensors [5 Power / round]	22
Strength Package: Class 8 (Strength 8)	
Gain Package: Class Beta (+2)	
Coverage: standard	
Navigational Sensors [5 Power / round]	20
Strength Package: Class 8 (Strength 8)	
Gain Package: Class Beta (+2)	
Probes: 60 probes of varying types	6

## Flight Control Systems

Autopilot: Flight Control 4, Coordination 3	15
[1 Power / round]	
Navigational Computer	
Main: Class 3 (+2) [2 Power / round]	4
Backup: 1	1
Inertial Damping Field	
Main	12
Strength: 9 [3 Power / round]	
Number: 2	
Backup	3
Strength: 6 [2 Power / round]	
Number: 2	
Attitude Control [1 Power / round]	1

## COMMUNICATIONS SYSTEMS

Type: Class 6 [2 Power / round]	12
Strength: 6	
Security: -2	
Emergency Communications: Yes	1
[2 Power / round]	

## TRACTOR BEAMS

Emitter: Class Delta [3 Power / STR used / round]	12
Accuracy: 4/5/7/10	
Location: Forward ventral, Deck 3	
Emitter: Class Alpha [3 Power / STR used / round]	3
Accuracy: 4/5/7/10	
Location: Aft, Deck 4	

## TRANSPORTERS

Type: Personnel [2 Power / use]	16
Pads: 6	
Emitter/Receiver Array: Personnel Type 6 (40,000 km)	
Energizing/Transition Coils: Class G (Strength 7)	
Number and Location: 1 on Deck 1	
Type: Cargo [2 Power]	10
Pads: 400 kg	
Emitter/Receiver Array: Cargo Type 3 (40,000 km)	
Energizing/Transition Coils: Class C (Strength 3)	
Number and Location: 1 on Deck 4	

**Cloaking Device: None**

## SECURITY SYSTEMS

Rating: 1	4
Anti-Intruder System: Yes [1 Power / round]	3

## SCIENCE SYSTEMS

Rating 1 (+0) [5 Power / round]	8
Specialized Systems: None	
Laboratories: 1 (Deck 1)	2

## TACTICAL SYSTEMS

### Saucer Dorsal Phaser Array: 32

Type X
Damage 200 [20 Power]
Number of Emitter: 120 (up to 3 shots / round)
Auto-Phaser Interlock: Accuracy 4/5/7/10
Range: 10/30,000/100,000/300,000
Location: Saucer top
Firing Arc: 405 degrees
Firing Modes: standard, continuous, pulse, wide

### Forward Torpedo Launcher 13

Standard Load: Type II photon torpedo (200 Damage)
Spread: 6
Range: 15/350,000/1,500,000/4,050,000
Targeting System: Accuracy 5/6/8/11
Power: [20 + 5 per torpedo fired]
Location: Forward, Deck 3
Firing Arc: Forward, but are self guided

### Torpedos carried: 30 3

### TA / T / TS: Class Gamma [2 Power / round] 12

Strength: 9
Bonus: +2

### Shields: (Forward, Aft, Port, Starboard) 24 (x4)

Shield Generator: Class 4 (Protection 610)
[61 Power / shield / round]
Shield Grid: Type B (+33% increase to 812 Protection)
Subspace Field Amplifiers: Class Delta (Threshold 200)
Recharging System: Class 1 (45 seconds)
Backup Shield Generators: 4 (1 per Shield)

### Auto Destruct System 3

## DESCRIPTION AND NOTES

**Fleet Data:** The Photon-Class was designed as small, fast and versatile vessel. Due to the restrictions in space offered it was built modular with 2 mission-specific modules attachable. Described above is the basic ship, without any modules connected to the hull.

Installation of a module requires a Shipboard Systems (Hull) roll against a difficulty of 6 and at least 30+3D6 minutes.

In each configuration the Photon-Class is one of the fastest ships in the federal navy and with the unique impulse thrusters one of the most manoeuvrable.

Intended as a ship of peace and science it was built with only one phaser, but surprisingly strong shields.

### Noteworthy vessels/service records/encounters:

U.S.S. Photon, prototype; U.S.S. Ion, lost in unexplored space;



## Scientific Module (+57 SU, total 972)(only paired)

### Operation Systems

#### SENSOR SYSTEMS (CHANGED)

Long Range Sensors [5 Power / round]	76
Range Package: Type 8 (Accuracy 3/4/7/10)	
High-Resolution: 6 light-years	
Low-Resolution: 18 light-years	
Strength Package: Class 10 (Strength 10)	
Gain Package: Class Gamma (+3)	
Coverage: +4.000 Substances/phenomena	
Lateral Sensors [5 Power / round]	41
Strength Package: Class 10 (Strength 10)	
Gain Package: Class Gamma (+3)	
Coverage: +4.000 Substances/phenomena	
Navigational Sensors [5 Power / round]	28
Strength Package: Class 10 (Strength 10)	
Gain Package: Class Gamma (+3)	

#### SCIENCE SYSTEMS (CHANGED)

Rating 4 (+3) [5 Power / round]	23
Specialized Systems: None	
Laboratories: 5 (4 on Deck 3, 1 on Deck 1)	2

## Stealth Module (+19 SU, total 934)(only paired)

### HULL SYSTEMS

#### SPECIALIZED HULL:

Energy Sheath (added)	9
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### PERSONNEL SYSTEMS

Crew / Passengers / Evac: 6 / 38 / 120

#### CREW QUARTERS

Spartan: 32 (added)	1
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#### Escape Pods (changed)

Number: 12	1
Capacity: 4 persons per pod	

### OPERATIONS SYSTEMS

#### HULL HOLOEMITTERS

Class Beta [20 Power / round] (added)	9
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## War Module Alpha (+62 SU, total 977)(only paired)

### OPERATION SYSTEMS

#### SENSOR SYSTEMS (CHANGED)

Probes: 30 probes of varying types (changed)	3
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### TACTICAL SYSTEMS

#### Port Phaser Array: (added)

Type X	15
Damage 200 [20 Power]	
Number of Emitter: 40 (up to 1 shot / round)	
Auto-Phaser Interlock: Accuracy 4/5/7/10	
Range: 10/30,000/100,000/300,000	
Location: Port, Deck 3	
Firing Arc: 360 degrees	
Firing Modes: standard, continuous, pulse, wide	

#### Starboard Phaser Array: (added)

Type X	15
Damage 200 [20 Power]	
Number of Emitter: 40 (up to 1 shot / round)	
Auto-Phaser Interlock: Accuracy 4/5/7/10	
Range: 10/30,000/100,000/300,000	
Location: Starboard, Deck 3	
Firing Arc: 360 degrees	
Firing Modes: standard, continuous, pulse, wide	

#### Port Torpedo Launcher (added)

Standard Load: Type II photon torpedo (200)	13
Spread: 6	
Range: 15/350,000/1,500,000/4,050,000	
Targeting System: Accuracy 5/6/8/11	
Power: [20 + 5 per torpedo fired]	
Location: Port, Deck 3	
Firing Arc: Backwards, but are self guided	

#### Starboard Torpedo Launcher (added)

Standard Load: Type II photon torpedo (200)	13
Spread: 6	
Range: 15/350,000/1,500,000/4,050,000	
Targeting System: Accuracy 5/6/8/11	
Power: [20 + 5 per torpedo fired]	
Location: Starboard, Deck 3	
Firing Arc: Backwards, but are self guided	

Torpedos carried: 3 x 40 (changed/added) 12



## **War Module Beta (+62 SU, total 977)(only paired)**

### **TACTICAL SYSTEMS**

<b>Inner Pulse Phaser Array: (added)</b>	<b>31</b>
Type X pulse	
Damage 250 [25 Power]	
Number of Emitter: 120 (up to 3 shots / round)	
Auto-Phaser Interlock: Accuracy 3/4/6/9	
Range: 10/30,000/100,000/300,000	
Location: Deck 3	
Firing Arc: Forward	
Firing Modes: standard, wide	
<b>Outer Pulse Phaser Array: (added)</b>	<b>31</b>
Type X pulse	
Damage 250 [25 Power]	
Number of Emitter: 120 (up to 3 shots / round)	
Auto-Phaser Interlock: Accuracy 3/4/6/9	
Range: 10/30,000/100,000/300,000	
Location: Deck 3	
Firing Arc: Forward	
Firing Modes: standard, wide	

## **Medical ER Module (+50 SU, total 965)(paired)**

### **PERSONNEL SYSTEMS**

<b>ENVIRONMENTAL SYSTEMS</b>	
Medical Facility 8 (+2)[8 Power / round] (added)	40
EMH: Mark I (Port) (added)	5
EMH: Mark I (Starboard) (added)	5

## **Courier Module (+33 SU, total 948)(paired)**

### **PERSONNEL SYSTEMS**

<b>Crew / Passengers / Evac: 6 / 10 / 120</b>	
<b>CREW QUARTERS</b>	
Expanded: 4 (added)	1
<b>Escape Pods (changed)</b>	1
Number: 10	
Capacity: 4 persons per pod	

### **OPERATIONS SYSTEMS**

<b>COMMUNICATIONS SYSTEMS (CHANGED)</b>	
Type: Class 10 [2 Power / round]	30
Strength: 10	
Security: -7	
Basic Upgrading: Class Beta (+2)	
Security Updating: Class Delta (-2)	
Holocommunications: Yes	1

## **Shuttle Module (+18 SU, total 933 SU)(paired)**

### **OPERATIONS SYSTEMS**

<b>TRACTOR BEAMS (added)</b>	
Emitter: Class Alpha [3 Power / STR / round]	3
Accuracy: 4/5/7/10	
Location: Port, Deck 3	
Emitter: Class Alpha [3 Power / STR / round]	3
Accuracy: 4/5/7/10	
Location: Starboard, Deck 3	

### **AUXILIARY SPACECRAFT SYSTEMS (added)**

<b>Shuttlebay(s): Capacity for 6 Size worth of ships</b>	<b>12</b>
Standard Complement: 6 Type 15 Shuttlecraft or	
2 Type 10 Shuttlecraft	
Location(s): Deck 3, port and starboard	



### ***Freight Module (+21 SU, total 936)(paired)***

#### **PERSONNEL SYSTEMS**

##### **Enviromental Systems**

Cargo Holds: 1,250 cubic meters (changed) 1  
Locations: 4 on Deck 3, Deck 4

#### **OPERATIONS SYSTEMS**

##### **TRANSPORTERS**

Type: Cargo [2 Power] 20  
Pads: 400 kg  
Emitter/Receiver Array: Cargo Type 3 (40,000 km)  
Energizing/Transition Coils: Class C (Strength 3)  
Location: 2 on Deck 3

### ***Medical ER / Courier Module Combination (+54 SU, total 969)***

#### **PERSONNEL SYSTEMS**

**Crew / Passengers / Evac:** 6 / 8 / 120

##### **CREW QUARTERS**

Expanded: 2 (added) 1

##### **ENVIROMENTAL SYSTEMS**

Medical Facility 5 (+1)[5 Power / round] (added) 25  
EMH: Mark I (added) 5

##### **Escape Pods (changed)**

Number: 8 1  
Capacity: 4 persons per pod

#### **OPERATIONS SYSTEMS**

##### **COMMUNICATIONS SYSTEMS (CHANGED)**

Type: Class 8 [2 Power / round] 21  
Strength: 8  
Security: -4  
Basic Uprating: Class Alpha (+1)  
Security Updating: Class Gamma (-1)  
Holocommunications: Yes 1

### ***Medical ER / Shuttle Module Combination (+39 SU, total 954)***

#### **PERSONNEL SYSTEMS**

##### **ENVIROMENTAL SYSTEMS**

Medical Facility 5 (+1)[5 Power / round] (added) 25  
EMH: Mark I (added) 5

#### **OPERATIONS SYSTEMS**

##### **TRACTOR BEAMS (added)**

Emitter: Class Alpha [3 Power / STR / round] 3  
Accuracy: 4/5/7/10  
Location: Shuttle-Module, Deck 3

#### **AUXILIARY SPACECRAFT SYSTEMS (added)**

**Shuttlebay(s): Capacity for 3 Size worth of ships** 6  
Standard Complement: 3 Type 15 Shuttlecraft or  
1 Type 10 Shuttlecraft  
Location(s): Deck 3, Shuttle-Module



**Medical ER / Freight Module Combination**  
(+44 SU, total 959)

**PERSONNEL SYSTEMS**

**ENVIROMENTAL SYSTEMS**

Medical Facility 5 (+1)[5 Power / round] (added)	25
EMH: Mark I (added)	5
Cargo Holds: 875 cubic meters (changed)	1
Locations: 2+1 on Deck 3, Deck 4	

**OPERATIONS SYSTEMS**

**TRANSPORTERS**

Type: Cargo [2 Power]	10
Pads: 400 kg	
Emitter/Receiver Array: Cargo Type 3 (40,000 km)	
Energizing/Transition Coils: Class C (Strength 3)	
Location: 1 on Deck 3 in Freight Module	

**Courier / Shuttle Module Combination**  
(+33 SU, total 948)

**PERSONNEL SYSTEMS**

**Crew / Passengers / Evac:** 6 / 8 / 120

**CREW QUARTERS**

Expanded: 2 (added)	1
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**Escape Pods (changed)**

Number: 8	1
Capacity: 4 persons per pod	

**OPERATIONS SYSTEMS**

**COMMUNICATIONS SYSTEMS (CHANGED)**

Type: Class 8 [2 Power / round]	21
Strength: 8	
Security: -4	
Basic Uprating: Class Beta (+1)	
Security Updating: Class Delta (-1)	
Holocommunications: Yes	1

**TRACTOR BEAMS (added)**

Emitter: Class Alpha [3 Power / STR / round]	3
Accuracy: 4/5/7/10	
Location: Shuttle Module, Deck 3	

**AUXILIARY SPACECRAFT SYSTEMS (added)**

<b>Shuttlebay(s): Capacity for 3 Size worth of ships</b>	6
Standard Complement: 3 Type 15 Shuttlecraft or 1 Type 10 Shuttlecraft	
Location(s): Deck 3, Shuttle-Module	

**Courier / Freight Module Combination**  
(+35 SU, total 950)

**PERSONNEL SYSTEMS**

**Crew / Passengers / Evac:** 6 / 8 / 120

**CREW QUARTERS**

Expanded: 2 (added)	1
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**ENVIROMENTAL SYSTEMS**

Cargo Holds: 875 cubic meters (changed)	1
Locations: 2+1 on Deck 3, Deck 4	

**Escape Pods (changed)**

Number: 8	1
Capacity: 4 persons per pod	

**OPERATIONS SYSTEMS**

**COMMUNICATIONS SYSTEMS (CHANGED)**

Type: Class 8 [2 Power / round]	21
Strength: 8	
Security: -4	
Basic Uprating: Class Beta (+1)	
Security Updating: Class Delta (-1)	
Holocommunications: Yes	

**TRANSPORTERS**

Type: Cargo [2 Power]	10
Pads: 400 kg	
Emitter/Receiver Array: Cargo Type 3 (40,000 km)	
Energizing/Transition Coils: Class C (Strength 3)	
Location: 1 on Deck 3 in Freight Module	





## Shuttle / Freight Module Combination (+33 SU, total 948)

### PERSONNEL SYSTEMS

#### ENVIRONMENTAL SYSTEMS

Cargo Holds: 875 cubic meters (changed) 1  
Locations: 2+1 on Deck 3, Deck 4

### OPERATIONS SYSTEMS

#### TRACTOR BEAMS (added)

Emitter: Class Alpha [3 Power / STR / round] 3  
Accuracy: 4/5/7/10  
Location: Shuttle Module, Deck 3

#### TRANSPORTERS

Type: Cargo [2 Power] 10  
Pads: 400 kg  
Emitter/Receiver Array: Cargo Type 3 (40,000 km)  
Energizing/Transition Coils: Class C (Strength 3)  
Location: 1 on Deck 3 in Freight Module

### AUXILIARY SPACECRAFT SYSTEMS (added)

Shuttlebay(s): Capacity for 3 Size worth of ships 6  
Standard Complement: 3 Type 15 Shuttlecraft or  
1 Type 10 Shuttlecraft  
Location(s): Deck 3, Shuttle-Module

## DESCRIPTION AND NOTES

**Science Module:** The Science Module, before the Dominion War one of the most frequently used, improves the already good sensors to some of the best in Starfleet. Also installed are four state-of-the-art laboratories with excellent science systems. Due to the massive sensor-enhancements this module is only available in paired installation.

**War Module Alpha:** The first War Module set adds a potent phaser strips and a standard torpedo launcher per module. Together these at least double the offensive potential of the Photon-Class. The amount of torpedos is expanded to 120, at the cost of 30 probes. This module is only installable as pair.

**War Module Beta:** After the successful test of pulse-phaser cannons on the U.S.S. Defiant a second, stronger set of wartime modules with a total of two pairs of 120-emitter pulse-phaser cannons were developed. This vastly enhances the offensive value of the ship. This module is only installable as pair.

**Stealth Module:** Sometimes even Starfleet has need of some special operations. For this purpose this module is equipped with a energy sheath hull to avoid detection and the hull can be camouflaged with holo-emitters. Being stealthy the Photon-Class can transport up to 32 special forces undetected to their destination. The installed holo-emitters allow for installation in paired configuration only.

**Courier Module:** For urgent diplomatic missions or fast personal transport a courier module was developed. It adds two expanded crew quarters for the leading diplomats and enhances the communication systems to secure standards. This Module can be installed alone or paired. In paired installation the communications are even further enhanced and are one of the best in Starfleet.

**Medical Emergency Module:** In times of medical emergencies this module can be installed to bring medical help as soon as possible to the place needed. Enhanced medical capabilities and an EMHs (Mark I) can treat several injured at once and the module has beds for up to 6 patients. In paired configuration up to twelve patients can be supported and the medical rating increases even further. Each module then has its own EMH which can work in any of the modules or even in the holodeck of the Photon-Class

**Shuttle Module:** Normally the small ships of the Photon-Class are not equipped with shuttles. With this module three small Type 15 Shuttlepods or one Type 10 Long-Range Shuttles can be transported. A small Class Alpha tractor beams assist in operating the shuttles. This module can operate in single or paired configuration.

**Freight Module:** To transport more cargo the freight modules adds an areas of 375 cubic meters of cargo-space. The module is equipped with a standard cargo transporter and has a large door. This module can also be used alone or in paired configuration.

