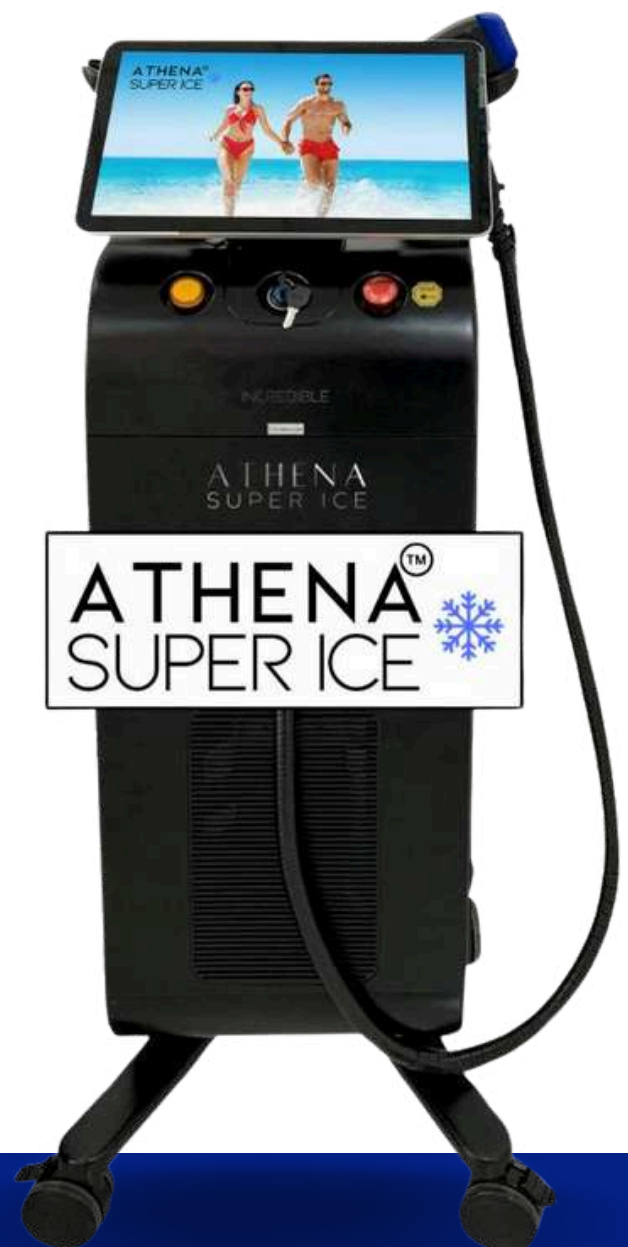


**INCREDIBLE**<sup>TM</sup>

**ATHENA SUPER ICE**<sup>TM</sup> ❄️

**MULTI-WAVELENGTH  
TECHNOLOGY FOR  
ADVANCED AESTHETIC  
TREATMENTS**



 **HEALTH CANADA LICENCED**

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## Regulatory Status and Certification

- Health Canada Licensed Medical Device
- ISO 13485:2016 Certified
- CE Mark Certified

The **Athena Super Ice™** Laser System represents a breakthrough in aesthetic laser technology, combining proprietary Triple Pulse Technology™. As a **Health Canada Licensed** medical device, it meets the highest standards for safety and efficacy in the aesthetic industry. The system's unique **SUPER ICE™ Cooling Technology** and versatile treatment modes deliver superior results across all skin types and hair colors.

## Multi-Wavelength Architecture

Simultaneous delivery of three optimal wavelengths:

- 755nm: Light skin and fine hair
- 808nm: Medium skin tones
- 1064nm: Darker skin types

## Technical Specifications

### Power and Performance

- Peak Power: 1,200 Energy
- Density: 10-120J/cm<sup>2</sup>
- Repetition Rate: 1-10Hz
- Spot Size: 12x24mm
- Operating Voltage: 110V;
- 50Hz Efficiency: 94%
- Power factor correction: >0.98
- Surge protection: 6kV



## Laser Sources

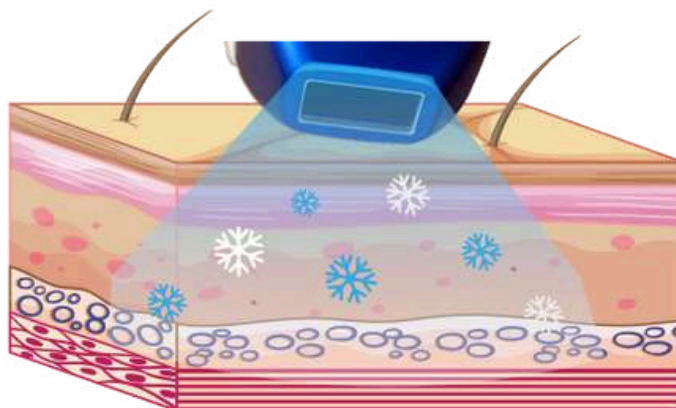
- Primary DIODE Laser (808 nm):
  - o Laser Lamp Manufactured in Germany
  - o Operating temperature: 20-25°C
- Secondary Alexandrite and ND:Yag crystal (755nm / 1064 nm ):
  - o Manufactured in Tokyo
  - o Operating temperature: 15-20°C

## Bulb Specifications

- Flash lamp type: Xenon ceramic chamber
- Rated lifetime: 150 million shots
- Energy per flash: 200J maximum
- Pulse duration capability: 0.2-300ms
- Bulb cooling: Closed-loop deionized water system

## SUPER ICE™ Cooling Technology

- Industry-leading cooling capacity to -31°C
- Real-time temperature monitoring
- Epidermal protection system
- Continuous contact cooling
- Pain minimization features



# Cooling System Architecture

## 1. Primary Circuit:

- o Coolant: Medical-grade ethylene glycol mixture
- o Temperature range: -31°C to 5°C
- o Flow rate: 1.2L/min
- o Pressure: 2.5 bar
- o Reservoir capacity: 3.75L

## 2. Secondary Circuit:

- o Type: Thermoelectric cooling
- o Power: 400W
- o Temperature differential:  $\Delta T$  40°C
- o Response time: <100ms

## 3. Standby power: 50W

## 4. Maximum cooling power: 800W

## 5. Dynamic power allocation

## 6. Energy-saving sleep mode

## 7. Automatic shutdown after 30 minutes idle

## 8. Temperature Control:

- o Precision:  $\pm 0.1^\circ\text{C}$
- o Update rate: 100Hz
- o Pre-cooling duration: 1-5 seconds
- o Post-pulse cooling duration: 1-3 seconds

# Revolutionary Technology Platform

## Triple Pulse Technology™

The system features three distinct pulse delivery modes:

### 1. Super Glide Mode

- o Continuous pulse delivery
- o Up to 10 Hz repetition rate
- o Optimal for large treatment areas
- o Enhanced patient comfort
- o Faster treatment times



### 2. Static Mode

- o Precision pulse delivery
- o Up to 1 Hz repetition rate
- o Ideal for sensitive areas
- o Maximum control and accuracy
- o Enhanced safety profile



### 3. Advanced Single Pulse

- o Refined energy delivery
- o Minimized patient discomfort
- o Precise melanin targeting
- o Tissue-protective features
- o Optimized treatment outcomes



## Multi-Layer Safety Protocols

- Real-time temperature monitoring (0.1°C precision)
- Impedance measurement (1kHz sampling)
- Melanin content analysis
- Pulse energy modulation

### Automated Safety Adjustments:

- Dynamic power reduction based on skin temperature
- Automatic pulse termination if skin temperature exceeds 42°C
- Real-time fluence adjustment based on melanin index
- Treatment area overlap detection

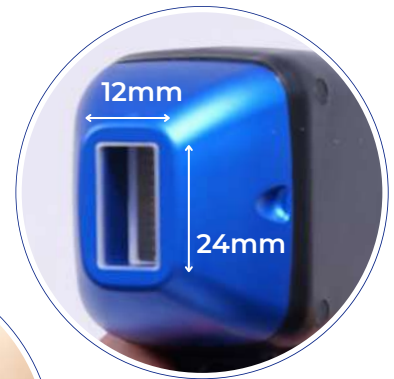
## Ergonomic Design and Usability

### Handpiece Features

- 12x24mm XL spot size
- Balanced weight distribution
- Ergonomic trigger design
- Built-in cooling system
- 2.0-inch control display

### User Interface

- 15-inch 4K main display
- Preset treatment parameters
- Skin type selection
- Cooling level adjustment
- Treatment tracking





# Laser Output Specifications

## Treatment Parameters

### Hair Removal Protocol

- Fine hair: 12-20 J/cm<sup>2</sup>, 20-40ms
- Medium hair: 20-35 J/cm<sup>2</sup>, 30-50ms
- Coarse hair: 35-55 J/cm<sup>2</sup>, 40-60ms
- Maximum treatment area speed: 4 cm<sup>2</sup>/second
- Recommended treatment intervals: 4-8 weeks

<b>Fitzpatrick Scale</b>	<b>Definition</b>	<b>Frequency</b>	<b>Fluence</b>	<b>Pulse</b>
<b>Fitzpatrick 1</b>	<b>Redheads, Albinos</b> Light pale, white Always burn, never tan	<b>2</b>	<b>70-80</b>	<b>5-100</b>
<b>Fitzpatrick 2</b>	<b>Northern European origin</b> White, Fair Usually burn with difficulty	<b>3</b>	<b>60-70</b>	<b>5-60</b>
<b>Fitzpatrick 3</b>	<b>Middle Eastern</b> Medium white to olive Sometimes mild burns, gradually tan to olive	<b>5</b>	<b>50-60</b>	<b>5-40</b>
<b>Fitzpatrick 4</b>	<b>Asians, Chinese, Some Indians and Pakistani's</b>  Olive tones	<b>6</b>	<b>50-55</b>	<b>5-30</b>

	Rarely burns, tans with ease to a moderate brown			
<b>Fitzpatrick 5</b>	<b>Southeast Asian's, Some Indian's and Pakistani's</b>  Brown tones  Rarely burn, tans very easily	<b>8</b>	<b>40-50</b>	<b>5-25</b>
<b>Fitzpatrick 6</b>	<b>African origin, Caribbean's, Jamaican's</b>  Dark Brown  Never burns, tans very easily, deeply pigmented	<b>10</b>	<b>30-50</b>	<b>5-20</b>

## Clinical Applications

### Treatment Protocols

1. Full Body Hair Removal
  - o 45-minute complete session capability
  - o Customizable by body area
  - o Skin type-specific settings
  - o Adjustable cooling levels
  
2. Sensitive Area Treatment
  - o Static mode for precise control
  - o Enhanced patient comfort
  - o Targeted energy delivery
  - o Maximum safety protocols



### 3. Large Area Treatment

- o Super Glide mode for efficiency
- o Continuous motion capability
- o Rapid treatment delivery
- o Maintained efficacy

## Clinical Safety Features

### Skin Type Selection and Safety

- Fitzpatrick scale classification selection
- Dynamic treatment parameter adjustment
- Treatment history tracking per skin area
- Automated emergency shutdown:
  - o Multiple pulse overlap detection
  - o Excessive treatment speed
  - o Impedance abnormalities



### Energy Delivery Monitoring

- Real-time pulse shape selection
- Energy delivery verification ( $\pm 2\%$ )
- Pulse duration monitoring ( $\pm 0.1\text{ms}$ )
- Spot size verification
- Treatment coverage mapping



## Service and Maintenance

### Calibration Requirements

- Energy output: Every 6 months
- System Maintenance: Every 12 months
- Temperature sensors: Every 12 months
- Cooling system: Every 12 months

## Consumable Components

- Flash lamp replacement: 150,000,000 shots
- Cooling fluid replacement: Every 12 months
- Air filters: Every 6 months



## Market Advantages

### Technological Superiority

- o SUPER ICE™ Cooling
- o Health Canada Licensed
- o Triple Pulse Technology™

### Treatment Versatility

- o All hair colors
- o All skin types (I-VI)
- o Multiple protocols
- o Year-round treatment

### Operational Benefits

- o Comprehensive support
- o Ergonomic handpiece design
- o Extended warranty coverage
- o Training and certification included

## Market Position Analysis

### Premium Segment

- o Advanced features
- o Superior technology
- o Higher ROI potential
- o Comprehensive warranty
- o Better treatment outcomes

### Competitive Advantages

- o Larger spot size
- o Superior cooling
- o Super glide mode
- o Faster treatment times
- o Triple Pulse Technology™

### Value Proposition

- o Greater versatility
- o Better patient comfort
- o Higher satisfaction rates
- o More treatable conditions
- o Reduced number of sessions

# Competitive Market Analysis

## Comparison with Leading Devices

Feature	Athena Super ICE™	Traditional Diode	IPL Systems	Nd:YAG Only
<b>Technology</b>	Triple Wavelength	Single wavelength	Broad spectrum	Single wavelength
<b>Power Output</b>	1200W	2000-3000W	1000-2000W	2000-3000W
<b>Spot Size</b>	12x24mm	10x12mm	8x40mm	6x12mm
<b>Cooling Temperature</b>	-31°C	-10°C	5°C	-5°C
<b>Pulse Modes</b>	Triple Technology	Single/Dual	Single	Single
<b>Treatment Speed</b>	Up to 10 Hz	Up to 5 Hz	Up to 3 Hz	Up to 5 Hz
<b>Skin Types Treated</b>	I-VI	III-V	I-VI	I-VI
<b>Hair Colors Treated</b>	All except white	Dark only	Dark only	Dark only
<b>Average Treatment Time</b>	45 min full body	120 min full body	120 min full body	150 min full body
<b>Number of shots</b>	150 million	25 million	N/A	3-10 million
<b>Regulatory Approval</b>	Health Canada	Varies	Varies	Varies

# Return on Investment Analysis

## 1. Treatment Revenue Potential

- o Full Body: \$250/session
- o Large Areas (e.g., full arms, full legs, full back): \$149 - 249/session
- o Small Areas (e.g., upper lip, cheeks, underarms): \$69 - 99/session
- o Package Pricing: \$414 - 1,494 (6-session packages)

## 2. Operational Efficiency

- o 45-minute full body treatments
  - ✓ Efficient treatment times allow for high throughput in a single day.
- o Multiple treatments per day
  - ✓ High flexibility to accommodate varied treatment areas.
- o Minimal consumable costs
  - ✓ Laser hair removal primarily requires energy and minimal replenishable materials.
- o Low maintenance requirements
  - ✓ Modern laser devices typically require annual maintenance and occasional calibration.

## 3. Monthly Revenue Projections

Scenario	Price/Session (Average)	Treatments per Week	Weekly Revenue	Monthly Revenue
Conservative	\$149	15	\$2,235	\$8,940
Moderate	\$200	25	\$5,000	\$20,000
High Volume	\$250	40	\$10,000	\$40,000

## Key Adjustments for Improved ROI

- o **Membership Program:** Encourages repeat clients through discounted pricing while maintaining profitability.
- o **Upsell Packages:** Offer bundled treatments to encourage clients to add areas or upgrade to full-body sessions.
- o **Marketing:** Focus on attracting high-volume clients via competitive pricing, promotions and referral incentives.
- o **Cost Control:** Maintain equipment efficiency to keep operational costs low, ensuring that revenue translates into profit.

## Marketing Strategy



### Launch Phase

- o Local advertising
- o Social media campaign
- o Influencer partnerships
- o Professional networking
- o Grand opening promotion



### Growth Phase

- o Package pricing
- o Seasonal promotions
- o Corporate partnerships
- o Patient referral program
- o Cross-selling opportunities



### Maintenance Phase

- o VIP events
- o Loyalty program
- o Educational seminars
- o Community engagement
- o Online reputation management



# Suggested Pricing Guide

## Women

### 1. Full Face Package (6 Sessions)

- o Includes: Full Face + Neck
- o Regular Price: \$894
- o Member Price: \$594

### 2. Brazilian + Underarms Package (6 Sessions)

- o Regular Price: \$2,088
- o Member Price: \$1,200

### 3. Full Body Package (6 Sessions)

- o Regular Price: \$2,994
- o Member Price: \$1,494



## Men

### 1. Upper Body Package (6 Sessions)

- o Includes: Chest, Upper Back, Lower Back
- o Regular Price: \$2,394
- o Member Price: \$1,494

### 2. Ultimate Men's Face & Neck Package

- o Included Areas: Forehead, cheeks, Neck, Nape of Neck
- o Regular Price: \$5,94
- o Member Price: \$415

### 3. Full Body Package (6 Sessions)

- o Regular Price: \$2,994
- o Member Price: \$1,494



## Promotions to Attract Clients

- **First-Time Client Discount:** 10% off any package.
- **Referral Discount:** \$50 off for every new client referral.
- **Seasonal Offer:** Full-Body Package at \$1,350 for 6 sessions (limited time).

## Staff Training and Development

- Initial manufacturer training
- Ongoing certification programs
- Treatment protocol updates
- Safety compliance training
- Customer service excellence



# Quick Guide

## Laser Hair Removal Contraindications

Although Laser Hair Removal is a safe treatment, clinical judgement is required for treatment. These are just guidelines.

- **Active infections:** Bacterial, fungal, or viral skin infections (e.g., herpes simplex outbreaks).
- **Psoriasis, eczema, or dermatitis:** These can worsen with laser exposure.
- **Keloid scars:** Individuals prone to keloids may experience abnormal scarring.
- **Photosensitizing drugs:** Medications like doxycycline, isotretinoin (Accutane), or certain antibiotics increase the risk of burns and hyperpigmentation.
- **Anticoagulants:** May increase the risk of bruising.
- **Steroids:** These may thin the skin and increase sensitivity.
- **Pregnancy and Breastfeeding:** Laser treatments are generally not recommended during pregnancy due to lack of safety studies
- **Cancers:** Active chemotherapy and radiation.
- **Immunosuppression**

## Pre-procedure Instructions for Client

- **Avoid direct sun exposure** for at least 2 weeks before treatment, and for 2 weeks after treatment.
- **Use sunscreen (SPF 30 or higher)** on the area to be treated during 2 weeks prior, and 2 weeks post treatment.
- **Do not use tanning beds, self-tanners, or bronzers** for at least 2 weeks before the procedure, and 2 weeks after.
- **Shave the area** to be treated **24 - 48 hours before** your appointment.
- **Avoid retinol** for 5 days prior to treatment, and 5 days after.

## Post Care Instructions

- **Cool the Area:** Apply a cold compress or ice pack wrapped in a clean cloth to soothe redness or swelling.
- **Apply aloe vera.**
- **Itching is normal post treatment.**
- **Redness and bumps are normal.**
- **Avoid Heat:** Stay away from hot showers, saunas, steam rooms, and hot tubs for at least 5 days.
- **Stay Out of the Sun:** Keep the treated area out of direct sunlight and avoid tanning beds for 2 weeks. If you must go outside, use a broad-spectrum sunscreen (SPF 30 or higher).
- Avoid irritating the skin further by scratching, rubbing, or exfoliating the treated area.
- **Skip Makeup and Fragranced Products:** If the face is treated, avoid makeup, perfumed lotions, and harsh skin products for at least 24 hours.

## How to Adjust the Laser

- If no heat or prickles are felt, increase fluence, do not adjust any other settings.
- If painful or too much heat, decrease fluence, do not adjust any other settings.

## Hair Removal Protocols by Body Area

### 1. Facial Hair Treatment

- o Energy Settings: 12-16 J/cm<sup>2</sup>
- o Pulse Duration: 20-30ms
- o Mode: Static
- o Cooling: -10°C to -15°C
- o Treatment Time: 10-15 minutes
- o Session Intervals: 4-6 weeks
- o Expected Sessions: 6-8

## 2. Full Leg Treatment

- o Energy Settings: 18-22 J/cm<sup>2</sup>
- o Pulse Duration: 30-40ms
- o Mode: Super Glide
- o Cooling: -15°C to -20°C
- o Treatment Time: 20-25 minutes
- o Session Intervals: 6-8 weeks
- o Expected Sessions: 6-8

## 3. Brazilian/Bikini Area

- o Energy Settings: 14-18 J/cm<sup>2</sup>
- o Pulse Duration: 25-35ms
- o Mode: Static
- o Cooling: -20°C to -25°C
- o Treatment Time: 15-20 minutes
- o Session Intervals: 6-8 weeks
- o Expected Sessions: 6-8

## 4. Back/Chest Treatment

- o Energy Settings: 20-24 J/cm<sup>2</sup>
- o Pulse Duration: 35-45ms
- o Mode: Super Glide
- o Cooling: -15°C to -20°C
- o Treatment Time: 20-25 minutes
- o Session Intervals: 6-8 weeks
- o Expected Sessions: 6-8

# Protocol Adjustments by Skin Type

## 1. Fitzpatrick I-II

- o Primary Wavelength: 755nm
- o Energy Range: 18-24 J/cm<sup>2</sup>
- o Cooling: -10°C to -15°C

## 2. Fitzpatrick III-IV

- o Primary Wavelength: 808nm
- o Energy Range: 16-20 J/cm<sup>2</sup>
- o Cooling: -15°C to -20°C

## 3. Fitzpatrick V-VI

- o Primary Wavelength: 1064nm
- o Energy Range: 12-16 J/cm<sup>2</sup>
- o Cooling: -20°C to -25°C

