

INCREDIBLETM

ATHENA SUPER ICETM ❄️

**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/cm²
- Repetition Rate: 1-10Hz
- Spot Size: 12x24mm
- Operating Voltage: 110V;
- 50Hz Efficiency: 94%
- Power factor correction: >0.98
- Surge protection: 6kV



Laser Sources

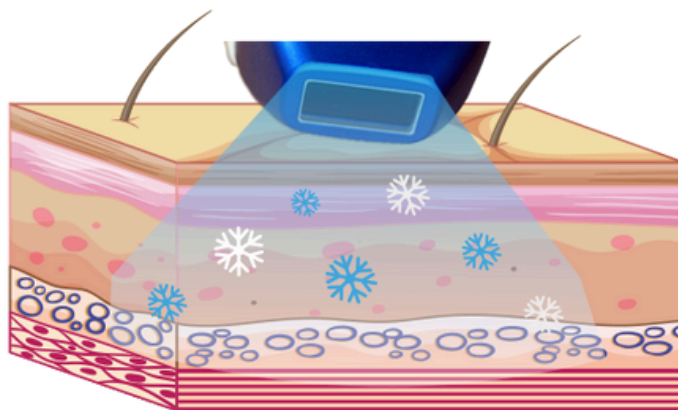
- Primary DIODE Laser (808 nm):
 - o Laser Lamp Manufactured in Germany
 - o Operating temperature: 20-25°C
- Secondary Alexandrite and ND:Yag crystal (755nm / 1064 nm):
 - o Manufactured in Tokyo
 - o Operating temperature: 15-20°C

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: ΔT 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

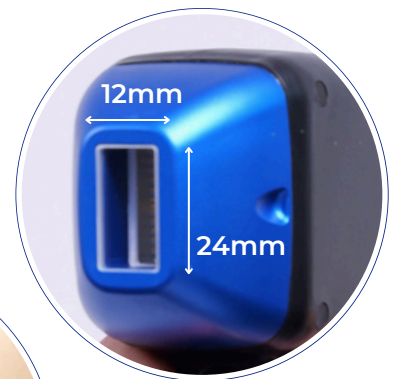
Ergonomic Design and Usability

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/cm², 20-40ms
- Medium hair: 20-35 J/cm², 30-50ms
- Coarse hair: 35-55 J/cm², 40-60ms
- Maximum treatment area speed: 4 cm²/second
- Recommended treatment intervals: 4-8 weeks

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

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

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
Technology	Triple Wavelength	Single wavelength	Broad spectrum	Single wavelength
Power Output	1200W	2000-3000W	1000-2000W	2000-3000W
Spot Size	12x24mm	10x12mm	8x40mm	6x12mm
Cooling Temperature	-31°C	-10°C	5°C	-5°C
Pulse Modes	Triple Technology	Single/Dual	Single	Single
Treatment Speed	Up to 10 Hz	Up to 5 Hz	Up to 3 Hz	Up to 5 Hz
Skin Types Treated	I-VI	III-V	I-VI	I-VI
Hair Colors Treated	All except white	Dark only	Dark only	Dark only
Average Treatment Time	45 min full body	120 min full body	120 min full body	150 min full body
Number of shots	150 million	25 million	N/A	3-10 million
Regulatory Approval	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/cm²
- 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/cm²
- 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/cm²
- 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/cm²
- 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/cm²
 - o Cooling: -10°C to -15°C
2. Fitzpatrick III-IV
 - o Primary Wavelength: 808nm
 - o Energy Range: 16-20 J/cm²
 - o Cooling: -15°C to -20°C
3. Fitzpatrick V-VI
 - o Primary Wavelength: 1064nm
 - o Energy Range: 12-16 J/cm²
 - o Cooling: -20°C to -25°C

