ADVANCED LIGHT-BASED AESTHETICS • PRECISION • CONTROL

DPL TECHNOLOGY

Direct Pulsed Light: a more controlled evolution of traditional IPL

SMARTER LIGHT. GREATER CONTROL.

DPL aims to refine pulsed-light care through more purposeful wavelength selection, controlled pulse structure, precise energy delivery and cooling. Rather than relying on one broad, generalized flash, a modern DPL platform can align light delivery more closely with the intended target - supporting precision, comfort and consistent professional results.

WHAT IS DPL?

In this overview, Direct Pulsed Light describes an advanced approach that prioritizes controlled delivery. Depending on the device, it may use specialized filters or handpieces, adjustable sub-pulses, tailored fluence, rapid repetition and active cooling.

HOW DOES LIGHT WORK?

Selected wavelengths are absorbed by chromophores such as melanin and haemoglobin. Light converts to heat in the target - a principle called selective photothermolysis - while pulse timing and cooling help manage the surrounding skin.

DPL VS. TRADITIONAL IPL

COMPARISON	TRADITIONAL / BASIC IPL	MODERN DPL APPROACH
Light delivery	Broad-spectrum flash shaped by general filters and settings.	More purposefully selected light with controlled or sequenced pulses.
Customization	Control varies; older systems may offer fewer adjustable parameters.	May offer finer control of fluence, pulse width, intervals and repetition.
Thermal control	Comfort and surface cooling vary significantly by platform.	Modern platforms commonly pair pulse control with active cooling.
Clinical focus	A generalized platform may be less targeted for a specific concern.	Parameters can be aligned more closely with the chromophore and treatment goal.

WHY DPL CAN BE HIGHLY EFFECTIVE

MORE SELECTIVE

Better-matched wavelengths and settings can concentrate energy around the intended target.

MORE CONTROLLED

Pulse and cooling management can build useful heat while limiting unnecessary thermal load.

MORE VERSATILE

Depending on the device, applications may include hair reduction, pigmentation, redness, acne and photorejuvenation.

THE DPL ADVANTAGE

It is not simply stronger light - it is smarter, better-controlled light. Effectiveness depends on the device specifications, indication, skin type, settings, cooling and operator training.

TECHNICAL NOTE

DPL is not a universally standardized acronym. It may mean Direct, Dye, Delicate or Dynamic Pulsed Light depending on the manufacturer. Compare the device's actual wavelengths, pulse controls, cooling, licensed indications and clinical evidence - not the acronym alone.

SOURCES

Babilas et al., "Intense pulsed light (IPL): a review," Lasers in Surgery and Medicine (2010) • Schoenewolf et al., "Intense pulsed light," Current Problems in Dermatology (2011) • Zhao et al., DPL terminology and vascular application, Dermatology and Therapy (2020).