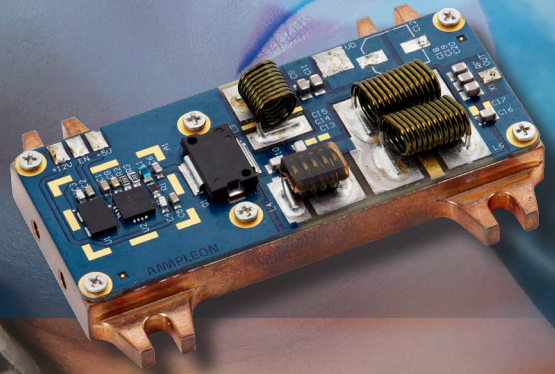


RF beauty devices – skin, body & rejuvenation applications powered by LDMOS

Delivering precision, power, and performance for next-generation aesthetic platforms – from compact home-use devices to advanced professional systems



Radio Frequency (RF) beauty technology is rapidly reshaping both professional and home-use skincare. In dermatology clinics, medical spas, and aesthetic platforms, RF devices operating from below 1 MHz up to 40.68 MHz are used for collagen stimulation, skin tightening, anti-aging, and skin rejuvenation - offering highly targeted, non-invasive treatments with visible results.

At the same time, the home-use RF beauty market is growing rapidly, as consumers seek to bring professional-grade treatments into their daily routines. Most portable devices operate below 3 MHz, but higher-frequency models are emerging, delivering clinic-quality outcomes in increasingly compact formats. While both segments rely on similar frequencies, power levels vary widely – from just a few watts in portable systems to hundreds of watts in professional platforms.

Whether you're developing a handheld beauty tool or powering an advanced clinical RF system, Ampleon provides the solid-state RF power technology to bring your innovation to life – with precision, performance, and reliability you can count on.

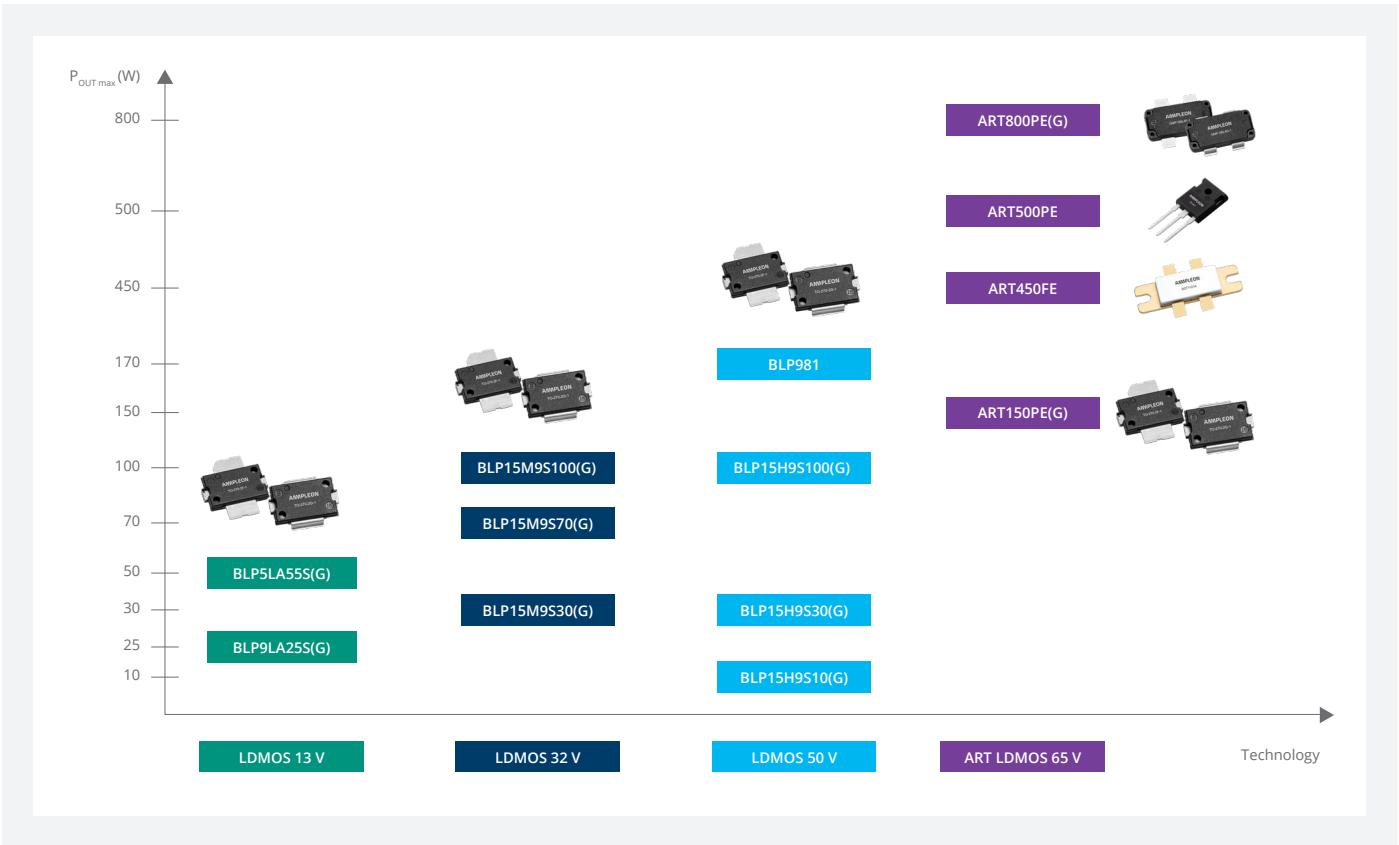
KEY FEATURES

- Optimized LDMOS portfolio for 0.3 to 40.68 MHz RF beauty applications
- High output power with excellent efficiency across the full frequency range
- Engineered for mismatch tolerance and safe RF on/off cycling
- Wide supply voltage range (10–65 V) for flexible system design
- Low thermal resistance for passive cooling solutions
- Compact packaging suited for integration in handheld and professional devices

KEY BENEFITS

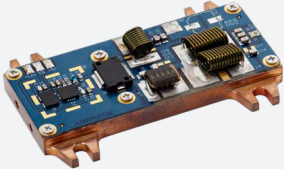
- Consistent performance in both professional and home-use beauty systems
- Reduced BOM complexity and compact footprint
- Minimized heat management challenges
- Enables high-frequency treatment options
- Reliable RF power delivery in portable, battery-powered systems

Solid-state RF power portfolio by technology and output range



Home-use applications – low voltage (10–20 V)

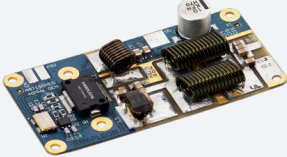
| Type number | Frequency (MHz) | V_{DS} (V) | P_{OUT} (W) | η_D (%) |
|---------------|-----------------|--------------|---------------|--------------|
| BLP15H9S30(G) | 40.58 | 10 | 3.5 | 75.9 |
| | | 12 | 4.7 | 71.8 |
| ART150PE(G) | 40.58 | 10 | 5.1 | 78.5 |
| | | 15 | 11.1 | 80.4 |
| | 6.78 | 10 | 3.88 | 82.4 |
| | | 20 | 15.5 | 84.3 |



BLP15H9S30(G) demo board

Professional applications – standard voltage (30–60 V)

| Type number | Frequency (MHz) | V_{DS} (V) | P_{OUT} (W) | η_D (%) |
|-------------|-----------------|--------------|---------------|--------------|
| ART150PE(G) | 40.58 | 30 | 43.4 | 84.6 |
| | | 40 | 76 | 86 |
| | | 55 | 134 | 84.3 |
| | 6.78 | 30 | 35.4 | 86.4 |
| | | 40 | 62.4 | 86.4 |
| | | 60 | 138 | 86.5 |



ART150PE(G) demo board

Contact information



www.ampleon.com/rf-beauty#contact