Infinity Specifications

Table 2-1. Infinity 40-100 Pulse Energy and Noise Specifications

	PULSE ENERGY AT [mJ/pulse]			NOISE AT [% std. dev]		
REP. RATE	1064 nm	532 nm	355 nm	1064 nm	532 nm	355 nm
0.1–50 Hz	500	250	200	1.0	1.8	2.0
50–100 Hz	400	200	160	1.7	2.5	2.5

Table 2-2. Infinity 40-100 Typical Pulse Widths

WAVELENGTH [nm]	PULSE WIDTH [ns]
1064	3.5
532	3.0
355	3.0

$\frac{0.500\ J}{3.5\times10^{-9}\ s} = 142.86\ MW$

Table 2-3. Infinity 40-100 Specifications

PARAMETER	SPECIFICATIONS
IR mode quality	< 1.5x Diffraction limit
Beam diameter, near field	> 95% of pulse energy through 5.5 mm at SHG crystal
Beam diameter, far field	> 84% of pulse energy into < 0.7 mrad divergence
Divergence, full angle	< 0.7 mrad
Linewidth Single-longitudinal mode Single shot (typical)	 < 2x transform limit < 250 MHz
Timing jitter (rms) rel. Q-switch synch	< 500 psec

$\frac{142.86\ MW}{\pi\left(\frac{5.5}{2}\right)^2}$