

1.2 SYSTEM DESIGN SPECIFICATIONS

The water treatment plant is designed to produce ultrapure water, under design flow conditions given in Table 1-2. The required water quality standards are given in Table 1-3. The feed water analysis, used as the design basis, is given in Table 1-1.

Table 1-1: Flow Rate Design Parameters

	<u>Normal</u>	<u>Max</u>
DI Loop Water Flow	65 gpm	65 gpm

Table 1-2: Water Quality Guarantee

<u>Parameter</u>	<u>Quality</u>	<u>Unit</u>	<u>Analytical Technique</u>
• Resistivity	18.2	MegOhm	Flow through cell
• Bacteria	<1.0	cfu/ml	membrane filtration technique - incubated for 48 hours at 30°C
• TOC	<1.0	ppb	In-line Anatel A-1000 analyzer
• Dissolved Silica	<0.10	ppb	Ion Chromatography
• Temp	21+/_0.5	°C	Thermo couple
• Dissolved Oxygen	<5	ppb	Orbisphere 3660