

The ColorQuestXE and UltraScan Vis share the same sphere, lamp, and collection optics, they differ in the spectrograph size and range, detection and electronics to be compatible with these changes. The UltraScan Vis can detect over the full range of Visible light, 360nm to 780nm compared to the ColorQuest XE which only detected light in the range of 400nm to 700nm, the minimum accepted range to calculate color measurements.

The APHA index was developed by reading a standard test of actual APHA solutions on a ColorQuestXE and UltraScanVis. This was done to insure the two instrument types had very close agreement in how they report APHA. We followed ASTM D5386 recommendation and used the YI E313 index as the basis for our polynomial fit. Each sensor has its own specific fit equation. The EasyMatch QC software determines which equation to use based on which instrument it is currently connected.