

FAQ 04-21 - What's the difference between SQC-300 Series Controllers and the discontinued SQC-122 and SQC-222 models?



What has *not* changed:

- SQC-300 Series controllers are exact replacements for SQC-122 and SQC-222 controllers.
 1. Same color LCD displays, housings, front panel controls, rear panel connectors, and signals.
 2. Plug-compatible with all sensors, cables, and accessories used with the SQC-122 & 222.
 3. 100% compatible with software, process recipes, and control interfaces used with SQC-122 & 222.

What has changed:

- *Some SQC-300 options and features were not available on the SQC-122 & 222:*
 1. A compact display in a smaller 3½" (2U) housing is now optional on the SQC-300 Series.
 2. SQC-300 Series can be configured with 2 or 4 QCM channels, and 8 or 16 digital I/O.
 3. RS-232 and USB interfaces are standard on SQC-300 Series; Ethernet is optional.
 4. Co-Deposition can be added to any SQC-300 Series controller.
 5. Frequency resolution and stability have been enhanced, which means better control of your process, especially at low deposition rates.
- *The real changes are inside the SQC-300 Series controllers.* The SQC-122 and SQC-222 were designed a few years ago. Some components have been discontinued by their manufacturers. New regulations (eg: the 'lead-free' RoHS directive) have been enacted. It was time for re-design. While we were at it, we took full advantage of newer electronic devices available today, to improve performance, and to add options and features customers had asked for.
- *SQC-300 Series controllers are priced significantly lower than the older SQC-122 & 222 (and significantly lower than competitive models as well).* If you're wondering how we can build a better controller for less money, take a look at consumer electronics: An average PC cost well over \$1000 just a few years ago; today they cost less than half that, with more speed, memory, and storage. (Now if we could just find that million a year market for thin film controllers)

SQC-300 Series controllers can be configured with options/features not found on the older SQC-122 & 222. If you want a new controller with exactly the same features and options (no extras) as the older units, here are the specific model number equivalents:

SQC-122 all models--> SQC-310-2-R-D
SQC-222 2-channels --> SQC-310-2-R-C
SQC-222 4-channels --> SQC-310-4-R-C

Note that a SQC-300 with new and different options can still directly replace older models. For example, the USB or optional Ethernet interfaces do not change the RS-232 which is included on all units and is identical to the older SQC-122 & 222. Or, substitute SQC-330 for the SQC-310 to get a compact display in a smaller housing, but all other functions, features, and interfacing remain the same.

If you still have any doubts or questions, please contact us.