

## ***Guide to Thornton 770MAX Replacement of 770PC***

The 770MAX Instrument System replaced the 770PC System as of January 2001.

### **Instrument and Sensor Model Equivalents**

Old 770PC Models	New 770MAX Models
772-20X	775-VA0 without relays; 775-VA1 with relays
772-21X	775-VA0 without relays; 775-VA1 with relays
771-20X without display	775-LA0 without relays; 775-LA1 with relays
771-21X without display	775-LA0 without relays; 775-LA1 with relays
774-231 gateway	not available
770PC Accessories	770MAX Equivalent Accessories
1XXX-77 patch cords depending on length	1XXX-79 depending on length
1000-71 rear cover assembly	1000-69 rear cover and 1000-80 cable grip kit
15540 wall/pipe mounting bracket	15540 (same)
1855-series Smart calibrators	1875 automatic Smart calibrator

Sensors are not interchangeable between 770PC and 770 MAX. Equivalent sensors are generally available as shown below.

770PC Sensors	770MAX Equivalent Sensors
250-series conductivity	230-series
251-series temperature	231-series
252-216 conductivity	230-216
252-261 conductivity	230-206
252-281 conductivity	230-205
253-20X sanitary conductivity	233-22X
251-311 temperature	231-311
341-series sanitary pressure—strain gage	321-series with different model # suffixes
342-series sanitary pressure—capacitance	322-series
344-series sanitary flow—target	use 325-series sanitary turbine, different model # suffixes
346-series sanitary tank level—strain gage	326-series with different model # suffixes
347-series sanitary tank level—capacitance	327-series
352-series pressure & tank level	332-series (non-metallic not available)
353-series pH & ORP	333-series except -421 & -521
354-series paddlewheel flow	334-series
355-series non-magnetic impeller flow	335-series
356-series vortex flow	336-series with different model # suffixes

### **770MAX Literature** available on request or download from [www.thorntoninc.com](http://www.thorntoninc.com)

770MAX data sheet	ML0067
Conductivity/resistivity sensor data sheet	ML0072
pH, ORP, flow, pressure, level, temperature sensor data sheet	ML0074
Sanitary sensor data sheet	ML0073
770MAX Engineering specification	ML0066
770MAX Instruction manual	84372
770MAX Service manual	84373

## Thornton Instrument Comparison

The 770MAX provides advantages and greater convenience in most areas. However, note the items in **bold** which may be a significant change for a particular application.

	Old 770PC	New 770MAX
<b>CAPABILITIES</b>		
Sensor channels	2 Smart	4 Smart plus 2 pulse flow
Display lines	3	4 at a time, 16 total
Analog outputs	2 optional	4 standard; 8 optional (115V operation only)
Relays	2 standard	4 <b>optional</b>
RS232	gateway required	standard
Power	115 or 230 VAC or 24 VDC, as specified	universal 100 – 240 VAC, DC power not available
Ratings/approvals	CE on special model only	UL & cUL (CSA standards) Recognized—all models; CE on models 775-XA0 only
<b>PERFORMANCE</b>		
Meter accuracy at 18 Mohm-cm	±0.4% of reading	±0.3% of reading
Cond/Resistivity repeatability	±0.3% of reading	±0.2% of reading
Temperature accuracy	±0.25°C	±0.20°C
Cond/Resistivity sensor accuracy	±1% of reading	±1% of reading
<b>PHYSICAL</b>		
Panel cutout	3.62 x 3.62" (92 x 92 mm)	3.78 x 3.78" (96 x 96 mm), <b>larger, with 4 corner holes</b>
Front bezel dimensions (H x W)	4.92 x 4.62" (125 x 117.3 mm)	4.92 x 4.50" (125 x 114.3 mm)
Depth behind panel	6.28" (160 mm)	4.61" (117 mm)
Wiring	fixed screw terminals	plug in connectors
Patch cords	connector at sensor end, screw terminal at meter	<b>connector both ends—eliminates wiring but</b> requires 0.5" (13 mm) hole for meter end connector to pass through