

Feature	nCompass LC	nCompass CM	Orion-Mi
<b>General</b>			
Touch Screen Sizes	4.3"	4.3"	7" and 10"
Configurable "Home" View	Yes	Yes	Yes
Loop Controls	1 or 2	1 - 3	1 - 15
PID Output (type and quantity vary by loop model)	Yes	Yes	Yes
Cascade & Humidity logic block	No	Yes	Yes
Monitor Inputs	none	1 - 15	1 - 15
Alarms: Process & Deviation (high, low & Dev band)	Yes	Yes	Yes
Alarms: Rate of Change, PID % and Output Defeat	No	Yes	Yes
Chart View Trend View (walk by view)	Yes	Yes	Yes
Security with Audit Trail (4 user groups/30 users)	Yes	Yes	Yes
Digital Inputs (note #1 LC, note #2 CM/Orion-Mi)	1 per loop	8 standard /16 max	8 standard /16 max
Digital Outputs (note #3 LC, note #4 CM/Orion-Mi)	4 max/loop	8 standard /16 max	8 standard /32 max
System Navigation: icon & Windows® drop down	Yes	Yes	No (drop down only)
Languages: 1-touch configuration 28 languages	Yes	Yes	No
FDC Loop Controls and Monitor Input accuracy comply with AMS2750E requirements	Yes	Yes	Yes
<b>Data Logging</b>			
Data File Naming (16 alphanumeric characters)	Yes	Yes	Yes
Data File start on boot, profile start or manual	Yes	Yes	Yes
Data File start on digital input	No	Yes	Yes
View active or archived data files on display	Yes	Yes	Yes
Data File export via USB or LAN (email or FTP)	Yes	Yes	Yes
Data File configurable auto stop-restart by day (1-31)	Yes	Yes	Yes
Configurable Data Interval	Yes	Yes	Yes
Operator Annotations (operator notes)	Yes	Yes	Yes
Digital Signatures	Yes	Yes	Yes
Bar Code Reader Input (Serial RS232; saved in Data Log File)	No	Yes	Yes
Comply with AMS2750E Data Log requirements	Yes	Yes	Yes
<b>Ramp Soak Profile Capability</b>			
Profile Status View	Yes	Yes	Yes
Profile: Max # of Programs	unlimited	unlimited	unlimited
Profile Naming (16 alphanumeric characters)	Yes	Yes	Yes
Profile: Max # of Steps per Program	64	99	99
Profile Sep "jump to" logic (within the profile)	Yes	Yes	Yes
Event Outputs (varies by model & configuration, 0 to 16)	Yes	Yes	Yes
End of Profile Output	Yes	Yes	Yes
Profile Type Configurable as Ramp Rate or Time Based	Yes	Yes	Yes
Profile Step Time: Adjust Step Time with Profile Active	No	Yes	Yes
Digital Input: Profile Start, Hold, Resume & Step Change	Yes (note #5)	Yes	Yes
Profile Guaranteed Soak configurable by Step	Yes	Yes	Yes
Profile "Wait For" Loop/Monitor Temperature by Step	Yes (note #6)	Yes	Yes
Profile "Wait For" Digital Input by Step	Yes (note #7)	Yes	Yes
Profile "Delta" SP logic by Step (note #8)	No	No	Yes
Profile Start Delayed (Hours & Minutes)	Yes	Yes	Yes
Profile Start by Time and Date	No	Yes	Yes
Profile Power Recovery Logic (note #9)	Yes	Yes	Yes
Profile End Configurable Logic (note #10 LC, note #11 CM/Mi)	Yes	Yes	Yes

Product Notes
<p><b>Note 1: Digital Inputs (DI) nCompass LC:</b> The LC offers 1 DI that may be configured as one of the following: Profile Run, Profile Hold, Profile Run/Hold, Profile Step Advance, Profile Abort and PID group #2</p>
<p><b>Note 2: Digital Inputs (DI) nCompass CM /Orion-Mi:</b> up to 16 DI configurable as System Run, Alarm Input, input for a DO, Profile functions (Start, Stop, Hold, Off, Step previous/advance), Output Defeat (specific or group of DO), all with time delays. DO are independent of loop controls.</p>
<p><b>Note 3: Digital Outputs (DO) nCompass LC:</b> Total 4 control outputs per B42. Output #1 is PID, Output #2 configurable as PID cool or as with Output #3 and #4, as alarm or event outputs. Alarms are specific to B42 board while profile events may be on one or more B42 boards</p>
<p><b>Note 4: Digital Outputs (DO) nCompass CM &amp; Orion-Mi:</b> The CM offers up to 16 and Orion-Mi up to 32 DO. Configurable as Loop or Monitor alarms, DI alarms, Event outputs used in Profiles, Event output for profile status (run, hold &amp; step change), Outputs based on DI, all with configurable cycle times to pulse, time delay to turn DO off and DO with counter &amp; alarm message</p>
<p><b>Note 5: nCompass LC Digital Input Profile Start:</b> The B2 board offers one DI that may be configured for one of several functions. Functions include Profile Run, Profile Hold, Profile Run/Hold, Step Advance, Profile Abort, PID Selection #1 or #2.</p>
<p><b>Note 6: Profile Step "Wait For" Loop/Monitor Temp:</b> Step time will not start until the selected loop /monitor pint achieves a target SP is standard on the nCompass CM/Orion-Mi. nCompass LC requires external relay to B42 Event Input. (see note 5 for list of B42 EI functions.)</p>
<p><b>Note 7: Step "Wait For" on Digital Input (DI):</b> Step time will not begin until a specific DI is closed; standard on nCompass CM and Orion-Mi with nCompass LC requires B42 Event Input configuration. (see note 5 for list of B42 EI functions.)</p>
<p><b>Note 8: Profile Delta Setpoint logic (Orion-Mi):</b> Delta offset SP to target loop control(s) based upon the highest or lowest loop or monitor temperature value.</p>
<p><b>Note 9: Profile Power Recovery Logic:</b> nCompass CM/Orion-Mi configurable as Off (profile off), Hold, Continue (from last SP), Restart or Resume. nCompass LC configurable as Continue from last SP, current PV or go to Static Mode</p>
<p><b>Note 10: Profile End Configurable Logic nCompass LC:</b> Current (static) control setpoint used prior to profile start (including event status) or Final SP of Profile (all events off).</p>
<p><b>Note 11: Profile End Configurable Logic nCompass CM /Mi:</b> Final SP of Profile with all Events active as configured</p>

Feature	nCompass LC	nCompass CM	Orion-Mi
<b>Communications</b>			
LAN Ethernet (note #12 lists LAN features)	Yes	Yes	Yes
USB (file transfer & config import-export)	Yes	Yes	Yes
Serial Modbus RS485 RTU (slave)	Yes	optional	optional
Serial Modbus RS232 (bar code scanner input only)	No	optional	optional
Compatible with EnVision Software (Serial Modbus RS485)	Yes	Yes	Yes
Modbus Register layout configurable as F4/D	Yes	Yes	No

Product Notes
<b>Note 12: LAN Features:</b> email/SMS text on alarm, FTP file transfer, Remote Access (VNC), Web Page (view only), send emails and time server synchronization.
<b>Note 13: nCompass Loop Controls:</b> Sample pricing includes mA PID and 3 relays configurable as alarms or events