

# Orion Kiln Control Solution August 2010

## Component Parts Pricing

### Control Module Assembly without Display

(Spare Part Control Module = SPCM shown in matrix)

<b>FDC - 2010- K5C – SPCM -</b> <input type="checkbox"/>	<b>Price</b>
1	<b>\$2,180</b>

#### 1 Optional Analog Input and Output

0: None	<b>n/c</b>
1: One Analog Input module with 2 analog inputs and one linear 4-20 mA output	<b>\$357</b>
2: Two Analog input modules; each have 2 analog inputs and one linear 4-20 mA output.	<b>\$714</b>
3: Three Analog input modules; each have 2 analog inputs and one linear 4-20 mA output.	<b>\$1,041</b>

**Note:**

Above unit without any optional Analog Input/Output modules comes complete with all necessary Control Module Components shown to the right including two analog input modules (qty 4 temperature inputs).

Not included above: The Time Delay Relay/Socket & Connecting Cable (connects the control module to display).

### Miscellaneous Options

	<b>Price</b>
<b>Manuals:</b>	
FDC-2010-K5C_Operators_Manual_v2.x.	\$40
FDC-2010-K5C_OEM_Configuration_Manual	\$30
Manuals above are available on our site at the link <a href="http://www.futuredesigncontrols.com/KilnFDC2010K5C.html">http://www.futuredesigncontrols.com/KilnFDC2010K5C.html</a>	
<b>ISTICK-PANEL:</b> USB Panel Mount Adapter for Memory I-Stick or Printer Connection	\$40
<b>ISTICK-4X-CVR:</b> Nema 4X USB Panel Mount Adapter	\$75
<b>KilnView Software:</b>	
PC communication to Orion Control System	\$2,500
<b>SNA-10A:</b> RS232 to RS485 Converter connects PC RS232 Serial connection to Orion RS485	\$145
<b>DB9M-DB9F-6ft:</b>	\$20
Cable [6 ft] to connect SNA10A to PC serial port	
<b>Printer:</b> HP 6540 ( or equal) inkjet printer	\$159
<b>Low Frequency Ferrite Beads (qty 2)</b>	
LFBead-240-2282-ND	\$10
<b>High Frequency Ferrite Beads (qty 2)</b>	
HFBead-240-4279-ND	\$10
Low Frequency Ferrite Beads are included for each analog input to provide additional protection for electrical "Noise" typically created by Variable Speed Drives.	

### Color Touch Screen Display (Windows CE)

<b>FDC-2010-TV3-42-K5C</b>	<b>Price</b>
Display includes CF card with embedded Kiln firmware	<b>\$1,200</b>

### CF and I-Stick Memory Components

Orion-K5C-CD-1GB version x.x	\$250
Orion-xxx-CF-1GB (blank CF card)	\$65
Orion-Istick-1GB	\$40

### Control Module Components

	<b>Price</b>
Control Module CPU: FC5A-D16RS1-K5C with K5C firmware installed	\$895
Real Time Clock: FC4A-PT1	\$45
Memory Cartridge 64KB: FC4A-PM64-K5C	\$45
The Real Time Clock & Memory cartridge are installed within the CPU module and recommend all three be purchased as kit below:	
Control Module, RTC and Memory Module Kit FC5A-D16RS1-K5C-PT1-PM64	\$985

Analog Input Module (2 temperature inputs & 1 mA output) FC4A-L03AP1	\$380
Relay Output Module (16 relay outputs) FC4A-R161	\$215
Digital Input Module (8 digital inputs 24VDC) FC4A-N08B1	\$95
Power Supply (24VDC 60 watt) PS5R-SD24	\$140
Communications RS485 Modbus 2-wire Serial Module FC4A-HPC3	\$45
Time Delay Relay & Socket GE1A-C10MA110 (relay) / SR2P-06 (socket)	\$30
Connecting Cable – Display to CPU Control Module CA-2011-8	\$25

### Software Licensing

Future Design Controls "Software" provided with the Control Module and the Color Touch Screen display is protected by copyright laws, international copyright treaties, intellectual property laws and treaties. For further information refer to the Kiln Control System manual.

This SOFTWARE is licensed at no charge to the end user as long as all Control Module & Display components are supplied by Future Design Controls whether as a new control system or if and when replacement parts are required. Software ownership and rights remain with Future Design Controls. Future Design Controls may terminate this License for failure to comply with these terms & conditions.