

# CIMREX

This PDF document is a subset of the Sheffield Automation MMC Controls, Block I/O and Cimrex HMI Product Guide, P/N M.1301.6219.

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**MMC CONTROLS AND BLOCK I/O  
MOTION SOLUTIONS PRODUCT GUIDE**

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**Cimrex**

Sheffield Automation

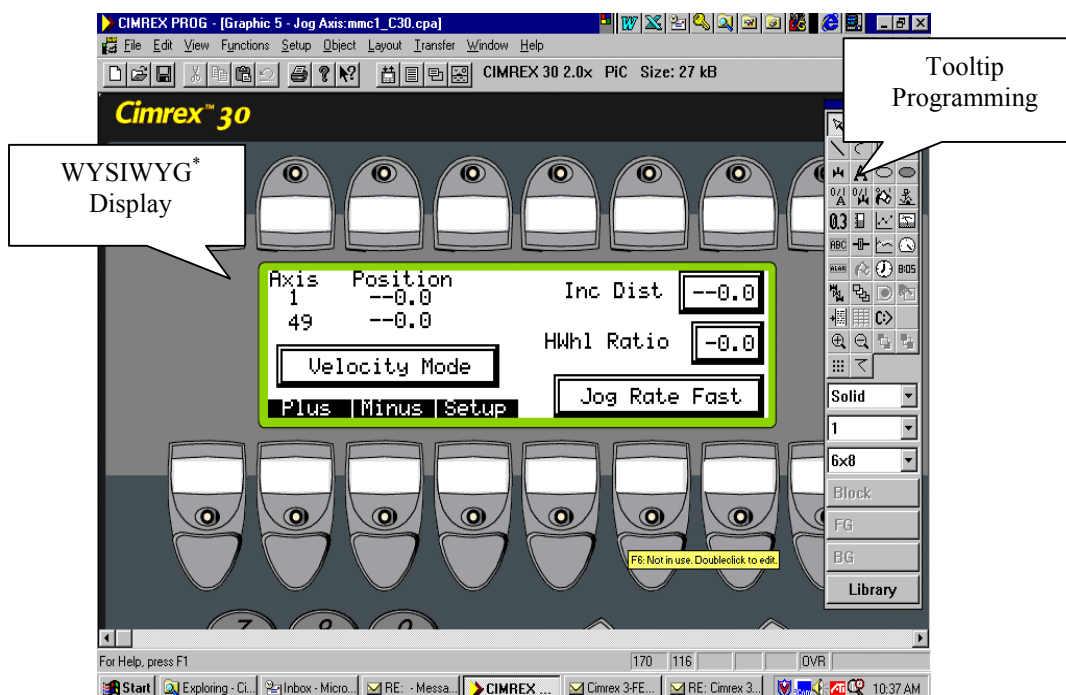


## Cimrex Prog

Cimrex Prog is a Windows-based configuration tool used for the full range of Cimrex operator interface terminals. Whether your application requires a simple data entry/display terminal or a color touchscreen with graphic capability, a single configuration software package, Cimrex Prog, is used.

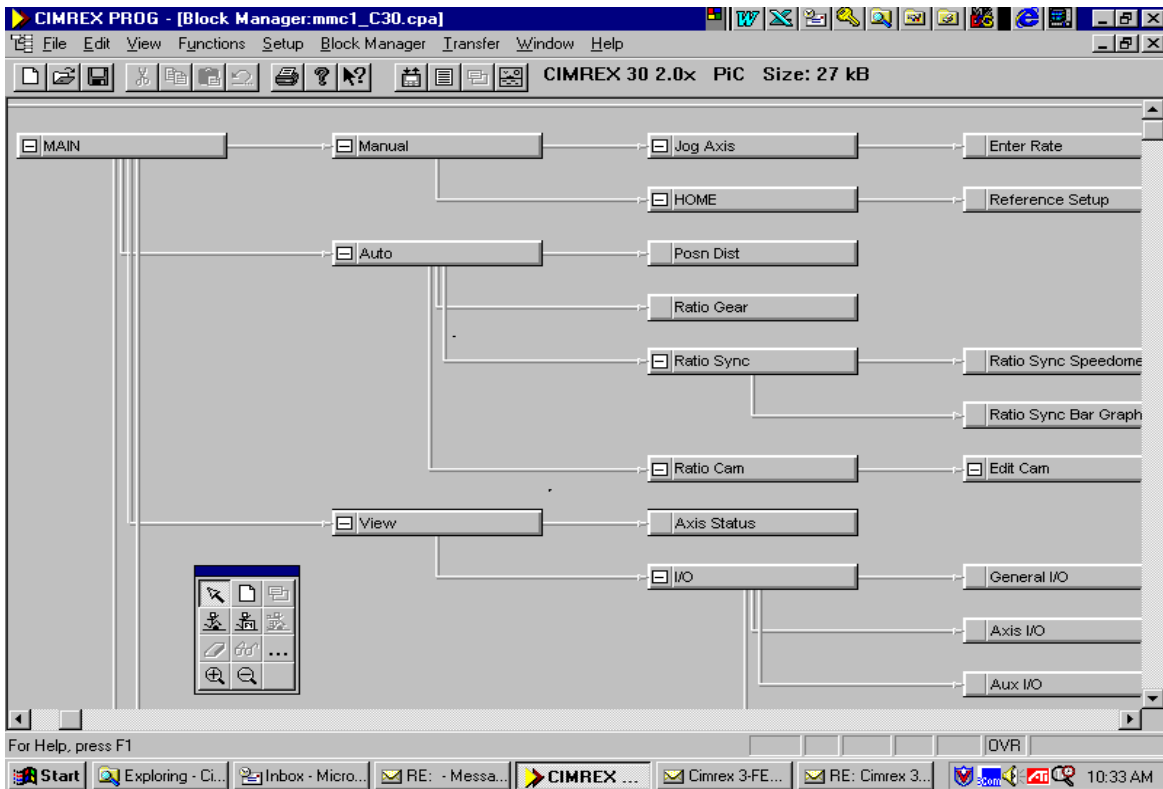


Cimrex Prog takes full advantage of the Windows graphical programming environment. Tooltips are provided to simplify object selection and placement. A graphic representation of the selected display terminal lets you see your application as it develops.



\* WYSIWYG - what you see is what you get

Organizing multi-page applications is simplified by Cimrex Prog's Block Manager which provides a graphical view of all display pages and the navigation between them.



To select a display terminal with the right set of capabilities for your application see the data sheets for the Cimrex 10, 20, 30, 60, 67, 69, 71, 90 and 91 operator interface terminals on the following pages.

Cimrex Prog Software
M.1301.4105

## Cimrex 10

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The Cimrex 10 is the simplest, lowest cost member of the Cimrex family of operator interface terminals. It provides an effective solution for simple applications, providing data entry and text display capability as well as recipe storage.



### Cimrex 10 - Small and Efficient

The CIMREX 10 is a text-based terminal with a backlit LCD display providing two lines by 20 characters of display. It is very cost effective and provides a simple terminal in a compact footprint. There are three programmable function keys in addition to menu navigation keys. A full numeric keypad is provided for data entry.

For a terminal with a very small footprint, the Cimrex 10 provides several high level functions. These include recipe storage, event scheduling, password protection, report generation capability and a real-time clock.

All of these practical functions make the Cimrex 10 a very efficient solution to the operator interface needs of simple machinery.

### Cimrex Application Software

Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provides simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PicPro referencing control variables using identical tag names.

**Specification Table**

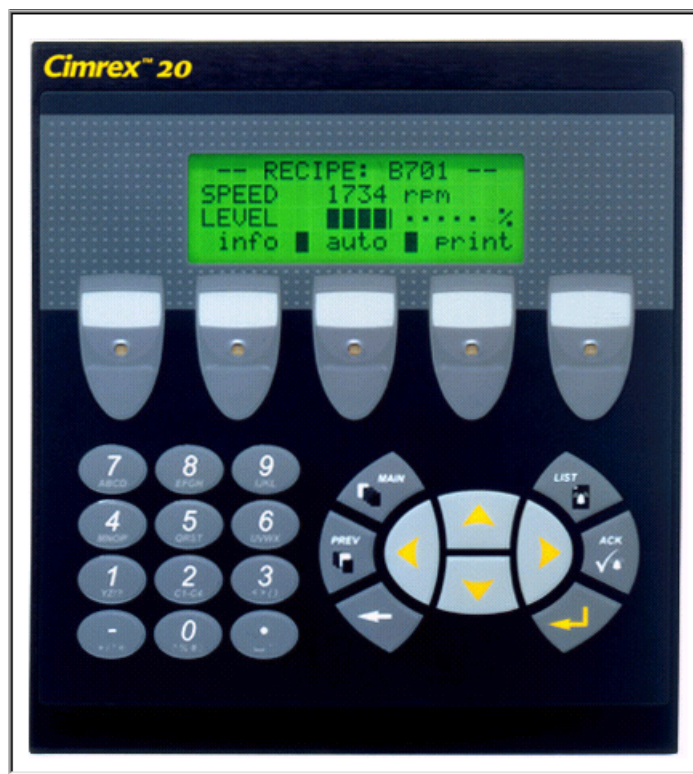
<b>Characteristics</b>	<b>Specifications</b>
Model	Cimrex 10
Part number	M.1016.2762
Display type	Backlit LCD
Presentation form	Text
Display size	2 lines by 20 characters
Text height	5 mm
Function keys	2 (programmable text)
Programming features	Event scheduling, recipe storage, report generation
Security password	8 levels
Memory	64 K flash
Power supply	+5 V DC
Power consumption	200mA
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1 EN 50082-2
Dimensions	W 142 mm x H 90 mm x D 29 mm
Weight	0.4 kg
Communication port	RS422/485, RS232



## Cimrex 20

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The Cimrex 20 is a simple, cost-effective member of the Cimrex family of operator interface terminals. It provides an effective solution for simple applications requiring a text-based operator interface. The Cimrex 20 provides data entry and text display as well as fault reporting.



### Cimrex 20 - Compact and Capable

The CIMREX 20 is a text-based terminal with a backlit LCD display providing four lines by 20 characters of display. It is very cost-effective and provides a simple terminal in a compact footprint. It includes five programmable function keys that can be customized with application-specific slide-in labels. Additionally, each function key has a two-color LED that can be illuminated to draw attention to special conditions. A full numeric keypad is provided for data entry, and menu selection keys are provided for display navigation.

For a terminal with a very small footprint, the Cimrex 20 provides many high-level functions. These include alarm handling, recipe storage, event scheduling, a real-time clock, password protection, and report-generation capability.

With all of this functionality supported by a 4-line by 20-character display, the Cimrex 20 is the optimal solution for applications requiring a simple, cost-effective, text-based operator interface.

## Cimrex Application Software

Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provide simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PiCPro referencing control variables using identical tag names.

### Specification Table

Characteristics	Specifications
Model	Cimrex 20
Part number	M.1016.2763
Display type	Backlit LCD
Presentation form	Text
Display size	4 lines by 20 characters
Text height	5 mm
LEDs	5 (two colors)
Function keys	5 (slide in label)
Alarm management	1 group
Programming features	Event scheduling, real-time clock, recipe storage, report generation
Security password	8 levels
Memory	64 K flash
Power supply	+24 V DC, 20 - 30 V
Power consumption	150mA (24V)
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1, EN 50082-2
Dimensions	W 147 mm x H 163.5 mm x D 38 mm
Weight	0.7 kg
Communication port	RS422/485, RS232

## Cimrex 30

The Cimrex 30 provides an excellent solution for applications where simple graphic display of information is required in addition to standard text display. In many applications, graphic display of information can simplify operator dialog, making machinery easier to use. The Cimrex 30 provides this capability in an easy-to-apply, cost-effective package.



### Cimrex 30 - Affordable Graphical Operator Interface

The Cimrex 30 provides both graphical and textual display of information using a backlit LCD display with 240 x 64 pixels resolution. Text display is scalable, with a maximum of 8 lines by 40 characters. eight two-color LED indicators are provided, as well as eight function keys with LEDs and customizable slide-in labels. Using the Cimrex 30, the advantages of a graphical operator interface, including bar graphs, slide bars, meters, lamps, and switches, are available in an affordable package. Also, applications can be customized with user-developed symbols.

Real-time trend graphs provide a dynamic view of process control parameters that can impart much more information to the operator than a single numeric display. Additionally, the Cimrex 30 offers recipe storage, event scheduling, real-time clock, password protection, and report-generation capability.

## Cimrex Application Software

Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provides simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PiCPro referencing control variables using identical tag names.

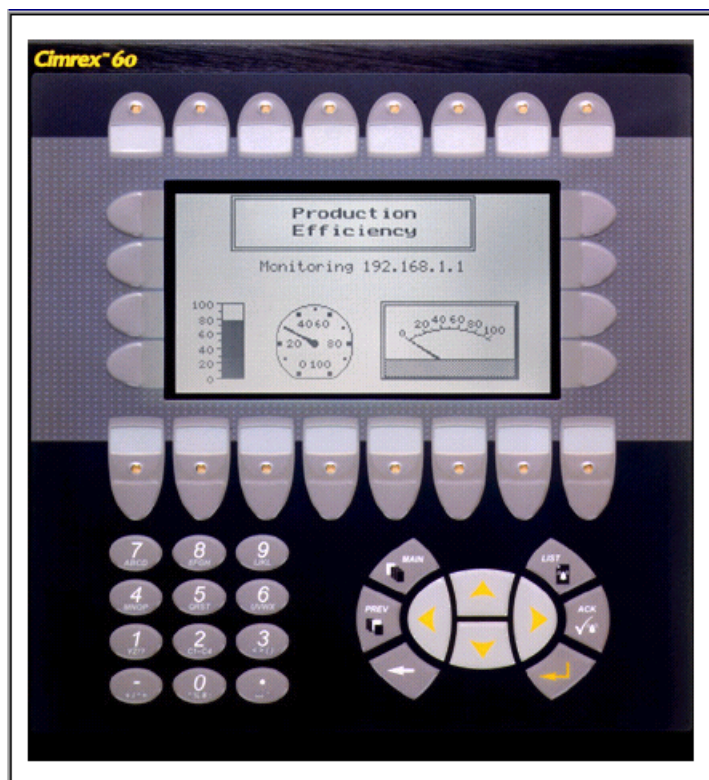
### Specification Table

Characteristics	Specifications
Model	Cimrex 30
Part number	M.1016.2764
Display type	Backlit LCD
Presentation form	Graphics + Text
Display size	240 x 64 pixels
Text height	Variable
LEDs	16 (two colors)
Function keys	8 (slide-in labels)
Alarm management	4 groups
Programming features	Event scheduling, trend graphs (real time), real-time clock, recipe storage, report generation
Security password	8 levels
Memory	128 K flash
Power supply	+24 V DC, 20 - 30 V
Power consumption	350 mA (24 V)
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1, EN 50082-2
Dimensions	W 212 mm x H 198 mm x D 69 mm
Weight	1.5 kg
Communication port	RS422/485, RS232

## Cimrex 60

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Many applications can benefit from the intuitive nature of graphical operator interfaces. Reduced operator training, simplified troubleshooting, and improved machine productivity are some of the benefits found using graphical operator interfaces. The Cimrex 60 provides access to all the benefits of a fully graphic operator terminal in an economic package.



### Cimrex 60 - Full Graphics Operator Interface

The Cimrex 60 is a fully graphic operator terminal using backlit LCD display with 240 x 128 pixels resolution. Both static and dynamic graphics can be used to render dialogs very rich in detail and more intuitive to the operator. This shortens machine operator training time and improves machine productivity. Applications can be developed using standard objects, including bar graphs, slide bars, meters, lamps, and switches, or customized with user-developed symbols.

Sixteen function keys, eight with two-color LEDs are provided. Eight of the function keys have slide-in labels that may be customized to the application.

Real-time and historic trend graphs are provided in addition to recipe storage, event scheduling, real-time clock, password protection, and report-generation capability. Using multiple alarm groups, the Cimrex 60 can address complex applications.

## Cimrex Application Software

Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provides simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PiCPro referencing control variables using identical tag names.

### Specification Table

Characteristics	Specifications
Model	Cimrex 60
Part number	M.1016.2765
Display type	Backlit LCD
Presentation form	Graphics + Text
Display size	240 x 128 pixels, 5.6"
Text height	Variable
LEDs	16 (two colors)
Function keys	16 (8 with slide-in tables)
Alarm management	4 groups
Programming features	Event scheduling, trend graphs (historic), real-time clock, recipe storage, report generation
Security password	8 levels
Memory	256 k flash
Power supply	+24 V DC, 20 - 30 V
Power consumption	500 mA (24 V)
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1, EN 50082-2
Dimensions	W 214 mm x H 232 mm x D 69 mm
Weight	1.6 kg
Communication port	RS422/485, RS232

## Cimrex 67/69

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### Cimrex 67/69 - Graphics Touchscreen Interface

The Cimrex 67 and 69 are fully graphic operator terminals using a passive display with 320 x 240 pixels resolution. Both static and dynamic graphics can be used to render dialogs very rich in detail and more intuitive to the operator. This shortens machine operator training time and improves machine productivity. Applications can be developed using standard objects, including bar graphs, slide bars, meters, lamps and switches or customized with user developed symbols.

Additionally, these screens can be software selected for landscape (horizontal display as shown) or portrait (vertical display) for applications where a vertical, narrower display is appropriate.



### Cimrex Application Software

Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provides simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PiCPro referencing control variables using identical tag names.

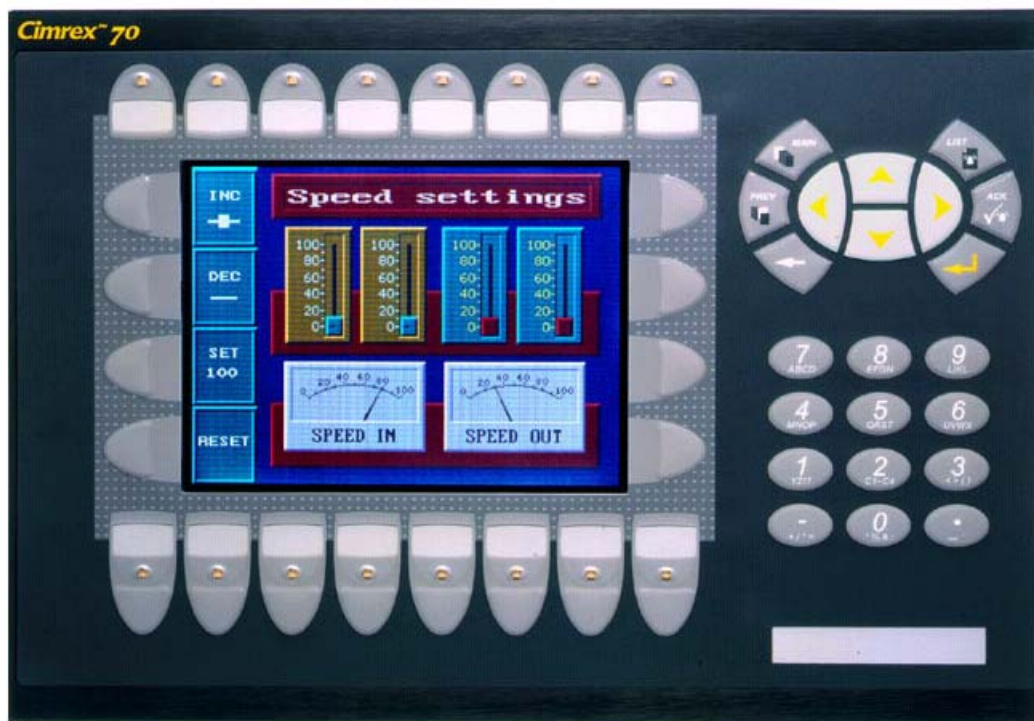
**Specification Table**

<b>Characteristics</b>	<b>Specifications</b>
Model	Cimrex 67/69
Part number	Cimrex 67 Part No. M. 1301.2073 Cimrex 69 Part No. M.1301.2076 Cimrex 69T Part No. M.1302.5176
Display type	Backlit LCD C67 - 16 Gray Scale C69 - 256 Colors Dual Scan Display C69T - 256 Color TFT Display
Presentation form	Graphics + Text
Display size	320 x 240 pixels, 5.8"
Text height	Variable
LEDs	none
Function keys	none
Alarm management	16 groups
Programming features	Event scheduling, trend graphs (historic), real-time clock, recipe storage, report generation
Security password	8 levels
Memory	400 k flash
Power supply	+24 V DC, 20 - 30 V
Power consumption	600 mA (24 V)
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1, EN 50082-2
Dimensions	W 200 mm x H 150 mm x D 70 mm
Weight	1.5 kg
Communication port	RS422/485, RS232



## Cimrex 70

Many applications can benefit from the intuitive nature of graphical operator interfaces. The combined effect of graphical objects with color results in reduced operator training, simplified troubleshooting, and improved machine productivity. The Cimrex 70 provides access to all the benefits of a fully graphic color operator terminal in an economical package.



### Cimrex 70 - Color Graphics Operator Interface

The Cimrex 70 is a fully graphic operator terminal using a passive color display with 320 x 240 pixels resolution. Both static and dynamic graphics can be used to render dialogs very rich in detail and more intuitive to the operator. This shortens machine operator training time and improves machine productivity. Applications can be developed using standard objects, including bar graphs, slide bars, meters, lamps, and switches, or customized with user-developed symbols.

Sixteen function keys, eight with two color LEDs are provided. Eight of the function keys have slide-in labels that may be customized to the application. Also, there are eight LED status indicators.

Real-time and historic trend graphs are provided in addition to recipe storage, event scheduling, real-time clock, password protection and report-generation capability. Using multiple alarm groups, the Cimrex 70 can address complex applications.

## Cimrex Application Software

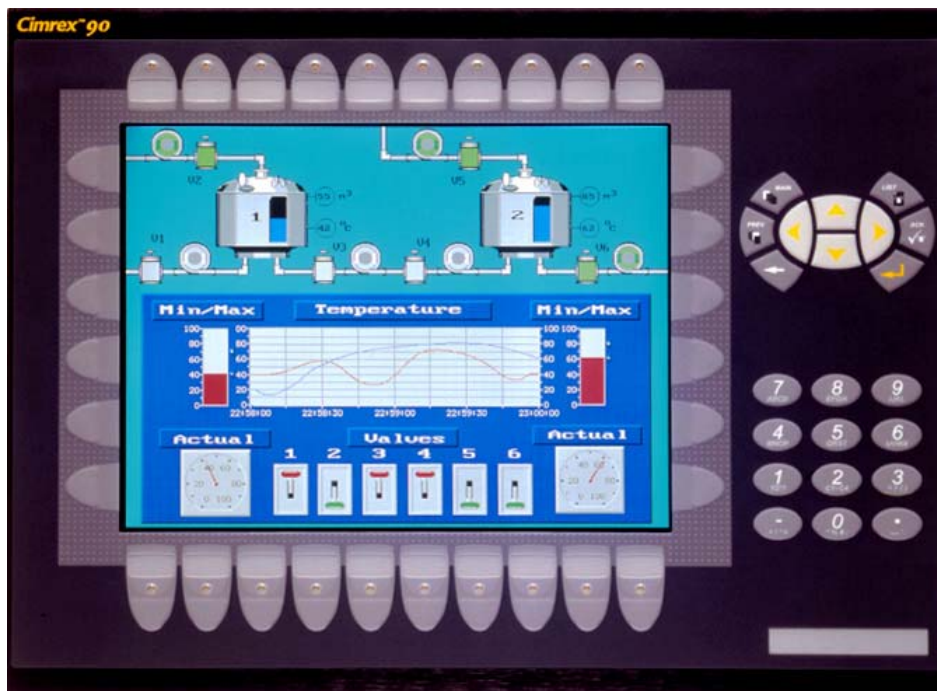
Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provides simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PiCPro referencing control variables using identical tag names.

### Specification Table

Characteristics	Specifications
Model	Cimrex 70
Part number	M.1016.2766
Display type	Backlit color LCD
Presentation form	Graphics + Text
Display size	320 x 240 pixels, 5.8"
Text height	Variable
LEDs	16 (two colors)
Function keys	16 (8 with slide-in tables)
Alarm management	16 groups
Programming features	Event scheduling, trend graphs (historic), real-time clock, recipe storage, report generation
Security password	8 levels
Memory	400 k flash
Power supply	+24 V DC, 20 - 30 V
Power consumption	600 mA (24 V)
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1, EN 50082-2
Dimensions	W 276 mm x H 198 mm x D 110 mm
Weight	1.7 kg
Expansion card locations	2
Communication port	RS422/485, RS232

## Cimrex 90

Many applications can benefit from the intuitive nature of graphical operator interfaces. The combined effect of graphical objects with color results in reduced operator training, simplified troubleshooting, and improved machine productivity. Sophisticated applications with a large amount of information to display will benefit from the high resolution and bright display provided by the Cimrex 90.



### Cimrex 90- Color Graphics Operator Interface

The Cimrex 90 is a fully graphic operator terminal using a bright TFT color display with 640 x 280 pixels resolution. Both static and dynamic graphics can be used to render dialogs very rich in detail and more intuitive to the operator. This shortens machine operator training time and improves machine productivity. Applications can be developed using standard objects, including bar graphs, slide bars, meters, lamps, and switches, or customized with user-developed symbols.

Twenty-two function keys are provided, ten with two-color LEDs. Ten of the function keys have slide-in labels that may be customized to the application. Also, there are ten LED status indicators.

Real-time and historic trend graphs are provided in addition to recipe storage, event scheduling, real-time clock, password protection, and report-generation capability. Using multiple alarm groups, the Cimrex 90 can address complex applications.

## Cimrex Application Software

Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provides simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PiCPro referencing control variables using identical tag names.

### Specification Table

Characteristics	Specifications
Model	Cimrex 90
Part number	M.1016.2767
Display type	Backlit color TFT
Presentation form	Graphics + Text
Display size	640 x 480 pixels, 10.4"
Text height	Variable
LEDs	20 (two colors with slide-in labels)
Function keys	22 (10 with own slide-in labels)
Alarm management	16 groups
Programming features	Event scheduling, trend graphs (historic), real-time clock, recipe storage, report generation
Security password	8 levels
Memory	2 M flash
Power supply	100-240 V AC
Power consumption	Max 0.35 A
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1, EN 50082-2
LVD	Satisfies EN 60950
Dimensions	W 367 mm x H 274 mm x D 110 mm
Weight	3.5 kg
Expansion card locations	2
Communication port	RS422/485, RS232

## Cimrex 91

Many applications can benefit from the intuitive nature of graphical operator interfaces and also want the convenience of a touchscreen interface. The combined effect of graphical objects with color results in reduced operator training, simplified troubleshooting, and improved machine productivity. Sophisticated applications with a large amount of information to display will benefit from the high resolution and bright display provided by the Cimrex 91.



### Cimrex 91 - Color Graphics Touchscreen Interface

The Cimrex 91 is a fully graphic operator terminal using a bright TFT color display with 640 x 480 pixels resolution. Both static and dynamic graphics can be used to render dialogs very rich in detail and more intuitive to the operator. This shortens machine operator training time and improves machine productivity. Applications can be developed using standard objects, including bar graphs, slide bars, meters, lamps, and switches, or customized with user-developed symbols.

The touchscreen overlay allows any area of the display to respond directly to operator touch.

Real-time and historic trend graphs are provided in addition to recipe storage, event scheduling, real-time clock, password protection, and report-generation capability. Using multiple alarm groups, the Cimrex 91 can address complex applications.

## Cimrex Application Software

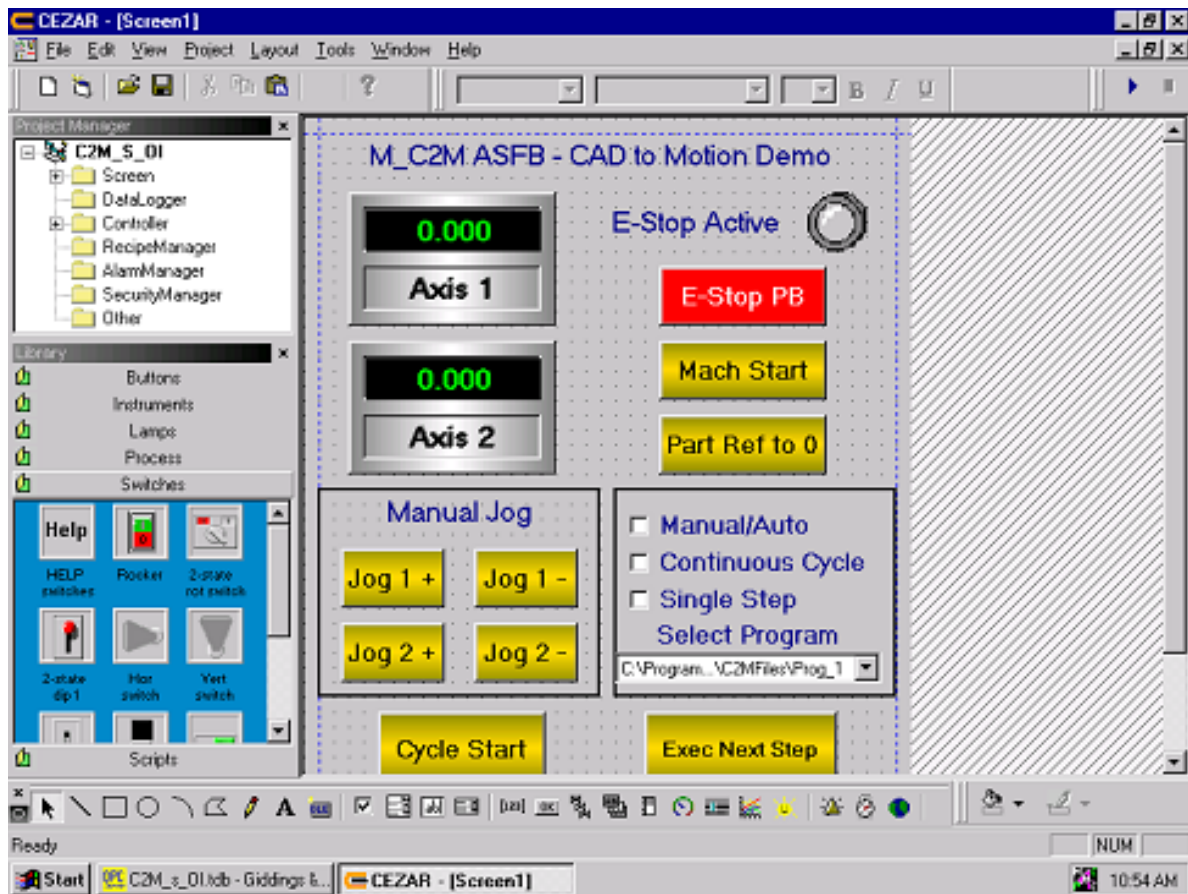
Cimrex applications are developed and maintained using Cimrex Prog, a Windows-based programming tool which provides simple wysiwyg (what you see is what you get) programming. Integration with PiC and MMC controls is a simple process with both Cimrex Prog and PiCPro referencing control variables using identical tag names.

### Specification Table

Characteristics	Specifications
Model	Cimrex 91
Part number	M.1016.2770
Display type	Backlit color TFT
Presentation form	Graphics + Text
Display size	640 x 480 pixels, 10.4"
Text height	Variable
Alarm management	16 groups
Programming features	Event scheduling, trend graphs (historic), real-time clock, recipe storage, report generation
Security password	8 levels
Memory	2 M flash
Power supply	100-240 V AC
Power consumption	Max 0.35 A
Ambient temperature	0 - 50°
Degree of protection (front)	IP65, Nema 4
EMC	Satisfies EN 50081-1, EN 50082-2
LVD	Satisfies EN 60950
Dimensions	W 290 mm x H 250 mm x D 110 mm
Weight	3.5 kg
Expansion card locations	2
Communication port	RS422/485, RS232

## Cimrex Cezar PC-HMI Software

Cezar HMI development and run-time software delivers the functionality and simplicity required for industrial operator interface applications in a Personal Computer environment. PC's using Windows NT or Windows 2000 or Windows XP operating systems can benefit from the simple, yet powerful, operator interface tools provided by CEZAR. A complete set of ready-to-use standard objects including Buttons, Instruments, Lamps, Process, Switches, and Scripts are provided. Using these standard objects basic operator interface operation can be accomplished in minutes. Objects can be shifted, re-dimensioned, shown, hidden and made to blink during operation. For sophisticated applications, users can extend the functionality of standard objects using Visual Basic Script and third-party Active X components.



CEZAR provides the basic SCADA capabilities needed for machine automation operator interface, including Trending, Recipe Management, Alarm Management, Trending, Data Logging and Password Protected security. Tools like the built-in SQL server for database access make CEZAR a powerful factory automation tool as well as a simple operator interface solution.

Integration with PiC and MMC controls is a simple process with both CEZAR and PiCPro referencing control variables using identical tag names. Use Cezar's built-in OPC client and the Giddings & Lewis OPC Server to integrate MMC for PC, MMC and PiC controls with CEZAR. Third-party controls are integrated using either built-in drivers or OPC servers. The ability to interface with multiple types of controls simultaneously allows CEZAR to integrate your complete application.

CEZAR is available as stand-alone software for use with any standard PC or pre-installed in the Cimrex C100 Industrial Personal Computer.

<b>Part Number</b>
Cezar Development Software - M.1301.4106
Cezar Runtime Software - M.1301.4107



## Cimrex C100 Industrial Personal Computer

The Cimrex C100 is a fully integrated industrial PC combining a Windows NT/2000 Pentium personal computer with a touchscreen and a 12.1 inch 800 x 600 pixel TFT display. Combine the C100 with the MMC for PC control to form a powerful machine/motion control/operator interface solution.



### Specification Table

Characteristics	Specifications
Model	Cimrex C100
Part number	Windows NT - M.1016.2770 Windows 2000 - M.1301.8329
CPU	Pentium MMX 266 Mhz 512KB pipeline burst level two cache Award 256KB Flash BIOS
Display type	12.1" TFT
Presentation form	Graphics + Text
Display	800 x 600 pixels 256K colors 2 * CFL, Replaceable C&T 69000, 2 MB SDRAM
Touch	Analog Resistive
Memory	256 MB standard 6.1 GB, 2.5" EIDE
Communication Ports	2 RS232 1 RS422 1 Parallel Port 2 USB Port
Ethernet	1 100BaseTx RJ-45 connector
Expansion Ports	1 32 bit PCI slot (2 brackets)
Mouse	PS2 mouse connector
Keyboard	PS2 keyboard connector

**Note:** PCI slot cover kit M.1300.7799 is required for C100 use with the MMC for PC.

