UniOP
Touch & Controls



EXOR

No limits
UniOP touch & controls

EXOR has a long-standing history of delivering the highest-quality products for industrial automation and embedded system applications. Prestigious automation companies confirm this reputation by relying on EXOR's tried & true know-how and offering UniOP products under various brand-label agreements. EXOR provides total HMI solutions, from board-level embedded systems to simple text displays, monochrome graphics units, full color touchscreen workstations, to powerful industrial computers. Exor products are currently sold, serviced, and supported in more than 40 countries around the world, with many large companies and OEM using EXOR units to expand their product offering. EXOR's goal is to provide easy to use products that meet today's challenging requirements with a strong focus on leveraging the advantages of ever-changing technologies.
Using continuing customer oriented product development, EXOR has taken specific applications in PLC, Motion and Industrial PC, and turned them into proven solutions.





eTOP02 / eTOP03


eTOP05


eTOP10B / eTOP11


eTOP20B

Integrated PLC



ePAD03/ePAD04



ePAD05/ePAD06

Customer-specific development

One software for all systems

200 drivers / fi

Compact - Capable - Cost Effective

The EXOR Product Range

This is unique...
Even the smallest systems have the capability of sending SMS messages or receiving data via the GSM modem and transferring it as a gateway to the control system.
There is the option of integrating a high-performance PLC module even in the lowest cost systems. The CoDeSys control development tool from 3S can be used to create your IEC 61131 applications. This provides an inexpensive and compact alternative to conventional PLC systems.

Video Input Module
Display up to four live video images from three composite video signals plus one VGA port with the new VMO10 video input module. UniOP panels can easily become the front-end for video cameras and computers and are ideal for displaying live images on the factory floor or in building automation/marine applications. Video windows can be freely positioned on the screen for multi-channel presentations or full-screen display of a single channel.




eTOP33B


eTOP40B


eTOP50B


eTOP38B / eTOP59B



CP10G-04/CP11G-04


ePALM10


ePAD33B

Low cost high-performance touch-displays

Worldwide sales & service

eldbuses

Many Devices - One Software Tool

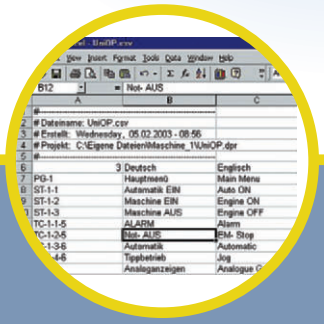
EXOR Designer 6

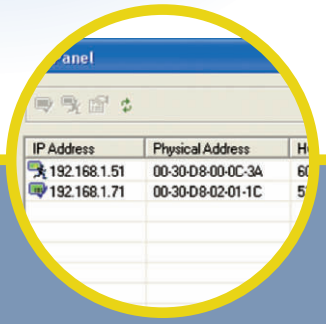
The software concept

Designer 6 provides users with an easy to use yet powerful software interface for building applications for the entire UniOP product family. Some of the features include the integration of TrueType fonts, support for Asian characters and Ethernet upload/download. In addition, access to recipe data, alarms, event list and trend buffers has been extended. With enhanced language management, 64K colors on TFT displays, auto execution of macro commands on power-up and optional video input module, Designer meets the need of the most demanding HMI applications in industrial and building automation. Detailed project documentation is provided by the extended printout functions, with cross-referencing. With a single programming tool for all UniOP panels, including text displays, graphic screens, handheld or touch panels, and the availability of more than 200 drivers, Designer gives you the tools necessary for all your HMI needs. The easy to use and intuitive interface will help you create screens that provide your operators with the information that they need, in real time, to manage the process.

Ethernet communication protocols

Most Ethernet-based communication protocols currently in use in the industry are available for use with one of the optional modules.
Among them:
Simatic S7
Modbus/TCP (Client&Server)
Ethernet/IP CIP
SAIA S-BUS
GE SRTP
Hitachi H
Festo EasyIP
Mitsubishi Q
Omron FINS
Bosch Rexroth SIS
Jetter PCOM7
CoDeSys L2/L4









Language management - import/export of applications

All alarm messages, legends and dynamic text information can be conveniently exported for ease of translation to an Excel spreadsheet. This makes it possible to re-import your text in different languages into your project file. The creation of Chinese text is also done with ease: with a few commands your lettering appears in Chinese characters.

Full Ethernet Connectivity

Connect your panel to a network and you are ready for upload/download of project files, access to recipe data, alarms and trend buffers. Several options are available for the panel's IP assignment including DHCP. You can now build your automation system completely based on Ethernet communication. Just plug one cable to program the HMI with Designer, network multiple panels, connect the HMI to the PLC and perform data acquisition from higher-level systems with the UniNet OPC Server.

Far East Languages

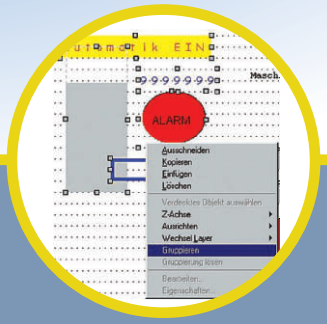
Far East languages such as Chinese and Japanese are now supported by Designer. Multilanguage applications including both Western and Far East scripts can be easily created with Designer and transferred to the panel for a great graphical presentation using TrueType fonts.

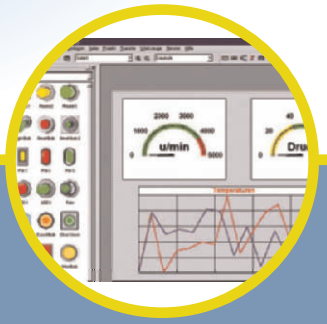
The text export/import facility has been extended also to Far East scripts using Unicode. Develop your applications in your own language, then export all the text information to a .csv text file and have it translated by professionals. Import the translated information to your Designer application for a complete integration.











More colors for realistic graphics

If you need sharper and more attractive screens you will enjoy the new color depth of 16 bits for images up to 64K colors, supported in all B-generation products with TFT display. Photorealistic images for higher quality displays are now possible.

The integrated graphic editor makes it possibile for users who have no special software knowledge to process either imported graphics or their own custom graphics. Therefore the pixel-oriented creation and positioning of graphics is made easy. Designer 6 supports the import of all popular standard graphic formats such as JPG, BMP, TIF, DXF.

Object-oriented workflow

Grouped objects can be copied into an object dictionary as a group using drag and drop. They can then be given a name and simply used again in other projects. This makes it easy for you to create and administer your own symbol or function groups.

All elements in the designer software are objects and this makes it easy for them to be processed, copied, cut and pasted, in the same way you would with other Windows-based programs. In this way objects can also be easily combined with each other. The software makes it possible for objects to be grouped or given a specific sequence.

Everything at a Glance
EXOR Operator Panels



		ePALM10	ePAD03/ePAD04	ePAD05/ePAD06	CP10G-04/CP11G-04	MKDG-06	BKDR-46/BKDC-46	ePAD33B/ePAD33BT	eTOP02	eTOP03	eTOP05	eTOP10B	eTOP11	eTOP19B	eTOP20B	eTOP33B	eTOP38B	eTOP40B	eTOP50B	eTOP59B
Display:	Type	LCD	LCD	LCD	LCD	LCD	LCD/STN Color	TFT Color	TFT Color	LCD monochrome	LCD monochrome	TFT Color	STN Color	High Brightness TFT Color	TFT Color	TFT Color	High Brightness TFT Color	TFT Color	TFT Color	TFT Color	High Brightness TFT Color
	Colors	-	-	-	-	-	- / 16	64K	256	-	-	64K	16	64K	64K	64K	64K	64K	64K	64K	64K
	Diagonal (inch)	-	-	-	-	-	5.6"	10.4"	3,5"	3.8"	5.6"	5.6"	5.6"	5.6"	7.5"	10.4"	10.4"	12.1"	15"	15"
	Lines x characters	8 x 20	4 x 20	4 x 20	4 x 20	8 x 40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Resolution	120 x 64	120 x 32	120 x 32	120 x 32	240 x 64	320 x 240 - 1/4 VGA	640 x 480 - VGA	320 x 240 - 1/4 VGA	320 x 240 - 1/4 VGA	320 x 240 - 1/4 VGA	320 x 240 - 1/4 VGA	320 x 240 - 1/4 VGA	320 x 240 - 1/4 VGA	640 x 480 - VGA	640 x 480 - VGA	800 x 600 - SVGA	800 x 600 - SVGA	1024 x 768 XVGA	1024 x 768 XVGA
	Dimming	-	-	-	-	-	-	yes	-	-	-	yes	-	yes	yes	yes	yes	yes	yes	yes
Operator Interface:	Touchscreen	-	-	-	-	-	-	- / yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Function Keys	9	4	9	12	23	33	35	-	-	-	-	-	-	-	-	-	-	-	-
	System keys	18	6	10	23	24	24	24	-	-	-	-	-	-	-	-	-	-	-	-
	Numerical keys	yes	-	yes	yes	yes	yes	yes	-	-	-	-	-	-	-	-	-	-	-	-
	LED indicators	20	5	10	13	25	25	25	-	-	-	-	-	-	-	-	-	-	-	-
Memory:	User Memory (Flash)	512KB	512 KB	512KB	512KB	512KB	32 MB	32 MB	1 MB	512KB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB
	Flash card option	-	-	-	-	-	yes	yes	-	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Recipe memory	16KB	16KB / -	16KB / -	16KB / -	16KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB	32KB
Interface:	PLC Port	RS-232, RS-485			RS-232, RS-485, CL				RS-232, RS-485			RS-232, RS-485, CL								
	Programming/Printer Port	yes	-	-	yes / -	yes	yes	yes	-	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	UniNet (server and client)	yes	yes / client	yes / client	yes / client	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Aux port (optional fieldbus/Ethernet)	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Ethernet programming	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Serial PLC Communication	38.400Bd	38.400Bd/9.600Bd	38.400Bd/9.600Bd	38.400Bd/9.600Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd	38.400Bd
	Video Input Option	-	-	-	-	-	-	yes	-	-	-	yes	-	yes	yes	yes	yes	yes	yes	yes
Comunication:	200 drivers, 11 fieldbuses	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Dual driver	yes	yes / -	yes / -	yes / -	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Functions:	Graphic	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Vector graphics	-	-	-	-	-	-	yes	-	-	-	yes	-	yes	yes	yes	yes	yes	yes	yes
	TTF Support	-	-	-	-	-	-	yes	-	-	-	yes	-	yes	yes	yes	yes	yes	yes	yes
	Trend acquisition and display	-	-	-	-	-	yes	yes	-	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Battery	yes	yes / -	yes / -	yes / -	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Real Time Clock	yes	yes / -	yes / -	yes / -	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Password	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Alarms	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024
Power Supply:	Event list	256	256 / -	256 / -	256 / -	256	1024	1024	256	256	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024
	Voltage	18 - 30 VDC																		
Environment:	Current rating (at 24 VDC)	0.3 A	0.25 A	0.25 A	0.3 A	0.4 A	0.6 A	1 A	0.4 A	0.4 A	0.6 A	0.8 A	0.6 A	0.8 A	0.8 A	1 A	1.7 A	1.1 A	1.3 A	1.5 A
	Degree of protection (front panel)	IP65	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X	IP65, NEMA 4X
Dimensions:	Temperature range (vertical installation)	0 – 50 °C	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C	0 – 45°C	0 – 50°C	0 – 50°C	0 – 50°C	0 – 45°C	0 – 45°C	-10 – +55°C	0 – 45°C	0 – 45°C	0 – 45°C	0 – 45°C	0 – 45°C	0 – 45°C
	Front L x H mm / inches	116x239 / 4.56x9.40	149x109 / 5.86x4.29	149x109 / 5.86x4.29	141x176 / 5.55x6.93	220x176 / 8.66x6.93	275x220 / 10.82x8.66	311x276 / 12.24x10.86	149x109 / 5.86x4.29	149x109 / 5.86x4.29	187x147 / 7.36x5.78	187x147 / 7.36x5.78	187x147 / 7.36x5.78	187x147 / 7.36x5.78	232x187 / 9.13x7.36	287x232 / 11.30x9.13	287x232 / 11.30x9.13	337x267 / 13.26x10.51	392x307 / 15.43x12.08	392x307 / 15.43x12.08
	Cutout L x H mm / inches	Handheld	136x96 / 5.35x3.78	136x96 / 5.35x3.78	128x163 / 5.04x6.41	207x163 / 8.15x6.41	262x207 / 10.31x8.15	292x257 / 11.49x10.12	136x96 / 5.35x3.78	136x96 / 5.35x3.78	176x136 / 6.93x5.35	176x136 / 6.93x5.35	176x136 / 6.93x5.35	176x136 / 6.93x5.35	221x176 / 8.70x6.93	276x221 / 10.86x8.70	276x221 / 10.86x8.70	326x256 / 12.83x10.08	381x296 / 15.00x11.65	381x296 / 15.00x11.65
	Weight	0.5 Kg (no cable)	1 Kg	1 Kg	1.1 Kg	1.2 Kg	1.9 Kg	2.7 Kg	1 Kg	1 Kg	1.4 Kg	1.4 Kg	1.4 Kg	1.4 Kg	1.6 Kg	2.3 Kg	2.5 Kg	2.9 Kg	3.9 Kg	3.9 Kg
Approvals:		CE, cULus	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus	CE, cULus	CE, cULus	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2
Programming:		Designer 6																		

Equipment	Memory		Communication modules											Video Input	HMIcontrol												
																											
Type Description	MEM-05 512 KB	MEM-10B 32 MB	TCM01 MPI	TCM02 Suconet	TCM03 DeviceNet	TCM04 Interbus	TCM07 MPI (no isolation)	TCM08 Profibus DP	TCM09 CANopen	TCM10 Ethernet UDP/IP	SCM11/SCM11-C Ethernet TCP/IP	TCM15* RS-232 interface	TCM16* RS-485 interface	TCM17 EIB	VMO10 Video Input Module	SCM03 PLC module with ISaGRAF, CANopen	SCM03-C PLC module with CoDeSys, CANopen	SCM11 PLC module with ISaGRAF, Ethernet	SCM11-C PLC module with CoDeSys, Ethernet,	SCM12 PLC module with ISaGRAF, Ethernet, CANopen	SCM12-C PLC module with CoDeSys, Ethernet, CANopen	UIM03 I/O module, 16 DI, 16 DO	UIM05 I/O module, 20 DI, 12 DO, 8 AI, 8 AO	UIM06 I/O module, 20 DI, 20 DO, 8 AI, 2 AO			
																										UniLOAD-USB Flash Card Programmer	PROTXX protection film	printable slide-in key legend sheets

* only for ePAD03, ePAD05, eTOP02, eTOP03

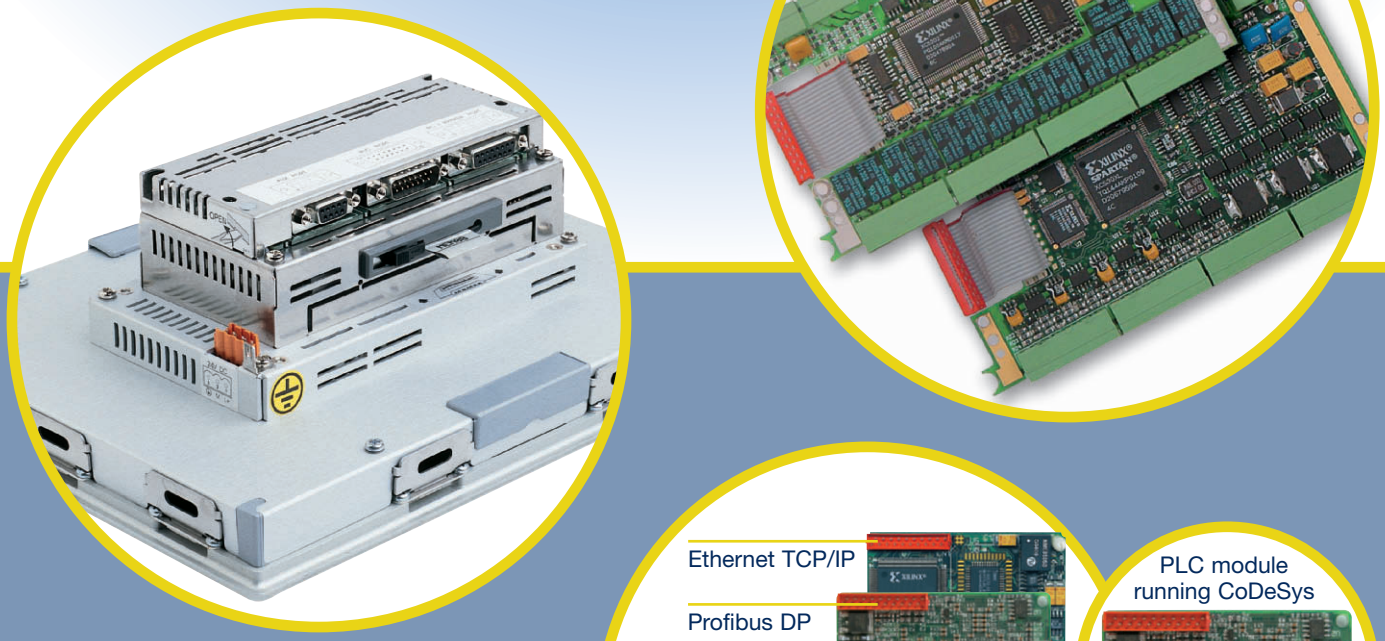
EXOR CONTROL SOLUTIONS MODULAR AND FLEXIBLE

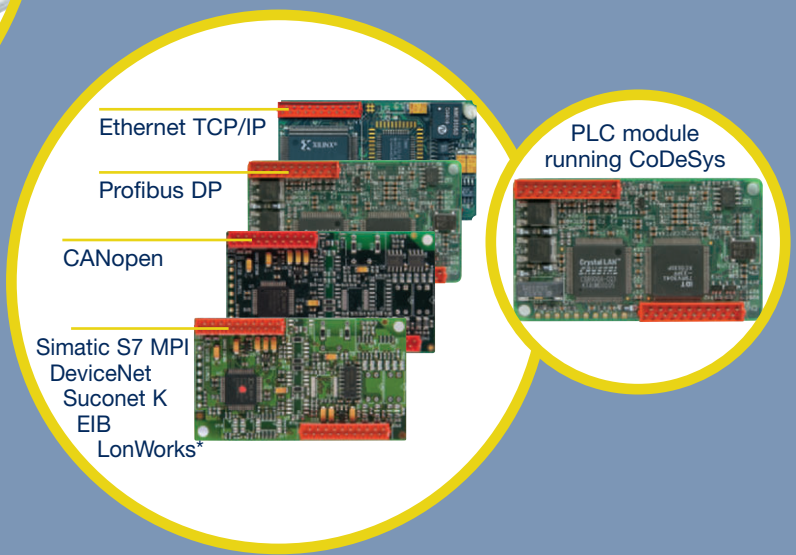
EXOR Embedded Technology

Flexible communication and customer-specific embedded technology have contributed to EXOR's high integration capability.

For many years now, all EXOR data entry systems have had a high level of integration capability because of the extensive offering of communication interfaces. EXOR's compatibility with the worldwide web, mobile phones, PLCs and the related communication standards such as XML or SOAP offer a highly flexible solution. Interchangeable communication modules provide a set of industry standard solutions, while keeping the communication open for possible changes in the future. EXOR systems provide expansion ports for optional modules with the connections to highly intelligent system boards that can provide customer specific solutions. This is true whether it's a web server, embedded PLC, motion control or simply an Ethernet module for connection to the planned or existing company network. With our multi-protocol UniNet OPC server, data can be simply integrated into the control and IT system via Ethernet.

Communication modules
Communication modules for all fieldbus and LAN applications can be integrated in all EXOR systems including handheld systems and Windows CE units.





CANopen

PROFIBUS

DeviceNet

* under devevelopment

EXOR ELECTRONIC R&D
10150 International Blvd.
Cincinnati, Ohio 45246
Ph. (513) 874-0900
Fax. (513) 874-2707
E-mail info@exor-rd.com

cod. BR001070501 - Subject to change without notice.