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

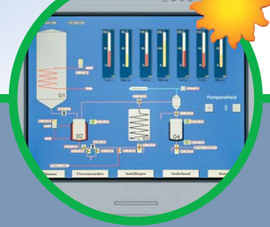
eTOP06 / eTOP06C

eTOP20C

eTOP33C

eTOP40C

eTOP50C



High Brightness Solutions

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 with the 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.
USB Interface
The new USB interface, available on most C-series products, is compatible with Flash drives and offers the simplest way to upgrade applications and copy recipe data.

Integrated PLC

Customer-specific development

ePAD03/ePAD04

ePAD05/ePAD06

CP10G-04/CP11G-04

ePALM10

ePAD33C

Low cost high-performance touch-displays

One software for all systems

Worldwide sales & service

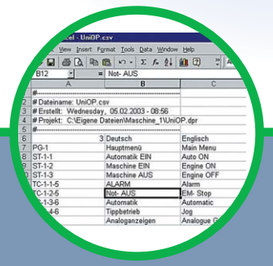
200 drivers / fieldbuses

Many Devices - One Software Tool

EXOR Designer 6

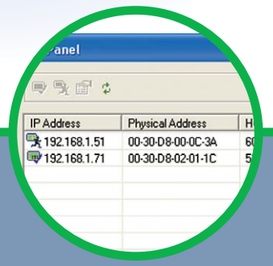
The software concept
Designer 6 provides users with an easy to use yet powerful software interface for building applications for the entire UniOP product family. Some of the features include the integration of TrueType fonts, support for Asian characters and Ethernet upload/download. In addition, access 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
Mitsubishi FX
Beckhoff



Designer 6.07 Highlights

Designer 6.07 offers new options in the display of numeric data with leading zero and masked data entry mode (password-like). Dynamic visibility control, to show or hide all objects in the project based on a PLC value, along with extended recipe configuration, with virtually no limit to the number of recipe sets and items, are also standard.
Internal memory buffer has been added and can be used for recipe name for controllers without ASCII support. Various improvements in the alarm presentation include priority-based or time-based strategies.



New with the C-Series eTOP

The latest hardware revision of the eTOP series of touch panels include a built in 10/100 baseT Ethernet interface and USB port.
The standard file system now in place allows the use of a portable USB flash drive to copy and load project and upgrade firmware.
A new streamlined automatic firmware upgrade procedure has also been implemented if files are present in the user memory. With the built in Ethernet port and the use of optional fieldbus module (Profibus, DeviceNET, CANopen...), the C series eTOP can act as a bridge between your industrial networks.

Multi Language support

Far East languages such as Chinese and Japanese are now supported by Designer for Multilanguage applications. Both Western and Far East scripts can coexist in a project using the text export/import facility that has been enhanced for Unicode. Simply export all the text information to a .csv file, have it translated by professionals and import the translated information to your Designer application for a complete integration.

Language management - import/export of applications

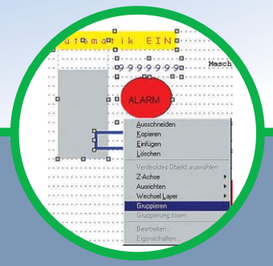
All alarm messages, legends and dynamic text information can be conveniently exported for ease of translation to an Excel spreadsheet. This makes it possible to re-import your text in different languages into your project file. The creation of Chinese text is also done with ease: with a few commands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

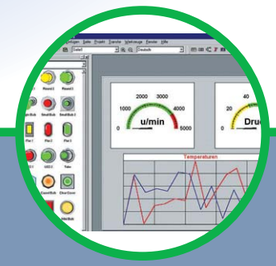
Enhanced graphics

All C-generation products with a TFT display support a color depth of 16 bits for images up to 64K colors.
The integrated graphic editor makes it possible 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	BKDR-46 / BKDC-46	ePAD33C *	eTOP02 / eTOP02C	eTOP03	eTOP05 / eTOP05C	eTOP06	eTOP06C	eTOP19C	eTOP20C	eTOP33C	eTOP38C	eTOP40C	eTOP49C	eTOP50C	eTOP59C
Display:	**Type**	LCD	LCD	LCD	LCD	LCD/STN Color	TFT Color	TFT Color	LCD monochrome	LCD monochrome	TFT Color	TFT Color	High Brightness TFT Color	TFT Color	TFT Color	High Brightness TFT Color	TFT Color	High Brightness TFT Color	TFT Color	High Brightness TFT Color
	Colors	-	-	-	-	- / 16	64K	256	-	- / 16 levels	256	64K	64K	64K	64K	64K	64K	64K	64K	64K
	Diagonal (inch)	-	-	-	-	5.7"	10.4"	3.5"	3.8"	5.7"	5.7"	5.7"	5.7"	7.5"	10.4"	10.4"	12.1"	12.1"	15"	15"
	Lines x characters	8 x 20	4 x 20	4 x 20	4 x 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Resolution	120 x 64	120 x 32	120 x 32	120 x 32	320 x 240	640 x 480	320 x 240	320 x 240	320 x 240	320 x 240	320 x 240	320 x 240	640 x 480	640 x 480	800 x 600	800 x 600	800 x 600	1024 x 768	1024 x 768
	Dimming	-	-	-	-	-	yes	-	-	- / yes	-	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	33	35	-	-	-	-	-	-	-	-	-	-	-	-	-
	System keys	18	6	10	23	24	24	-	-	-	-	-	-	-	-	-	-	-	-	-
	Numerical keys	yes	-	yes	yes	yes	yes	-	-	-	-	-	-	-	-	-	-	-	-	-
	LED indicators	20	5	10	13	25	25	-	-	-	-	-	-	-	-	-	-	-	-	-
Memory:	**User Memory (Flash)**	512KB	512 KB	512KB	512KB	32 MB	64 MB	1 MB / 2 MB	512KB	32 MB / 64 MB	32 MB	64 MB	64 MB	64 MB	64 MB	64 MB	64 MB	64 MB	64 MB	64 MB
	Flash card option	-	-	-	-	yes	yes	-	-	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
	Recipe memory	16KB	16KB / -	16KB / -	16KB / -	32KB	Flash*	32KB	32KB	32KB / Flash*	32KB	Flash*	Flash*	Flash*	Flash*	Flash*	Flash*	Flash*	Flash*	Flash*
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 Port (built-in)	-	-	-	-	-	yes	- / yes	-	- / yes	-	yes	yes	yes	yes	yes	yes	yes	yes	yes
	USB Port	-	-	-	-	-	yes *	-	-	- / yes *	-	yes *	yes *	yes *	yes *	yes *	yes *	yes *	yes *	yes *
	Video Input Option	-	-	-	-	-	yes	-	-	-	-	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	yes	yes
	TrueType Font Support	-	-	-	-	-	yes	-	-	- / yes	-	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	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 / -	1024	1024	256	256	1024	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	0.6 A	1.2 A	0.4 A	0.4 A	0.6 A / 0.8 A	0.5 A	1.0 A	1.0 A	1.1 A	1.2 A	1.9 A	1.3 A	1.8 A	1.5 A	1.7 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 – 45°C	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C	0 – 50°C	-10 – +55°C	0 – 45°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	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	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	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	326x256 / 12.83x10.08	381x296 / 15.00x11.65	381x296 / 15.00x11.65
	Weight	0.5 Kg (without cable)	1 Kg	1 Kg	1.1 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	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, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus, Class I Div 2	CE, cULus **	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
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 KNX	VMO10 Video Input Module	SCM05* PLC module with ISaGRAF, CANopen	SCM05-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

* release Q3 2008
** pending
*** only for ePAD03, ePAD05, eTOP02, eTOP03

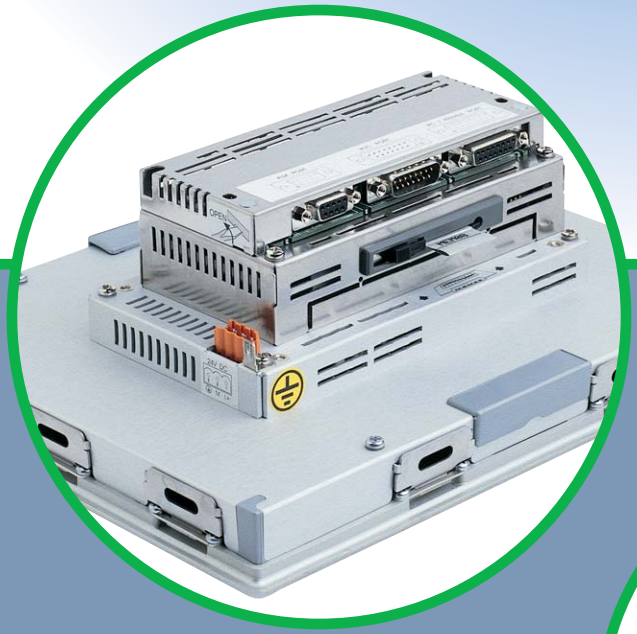
EXOR Control Solutions: Modular and Flexible

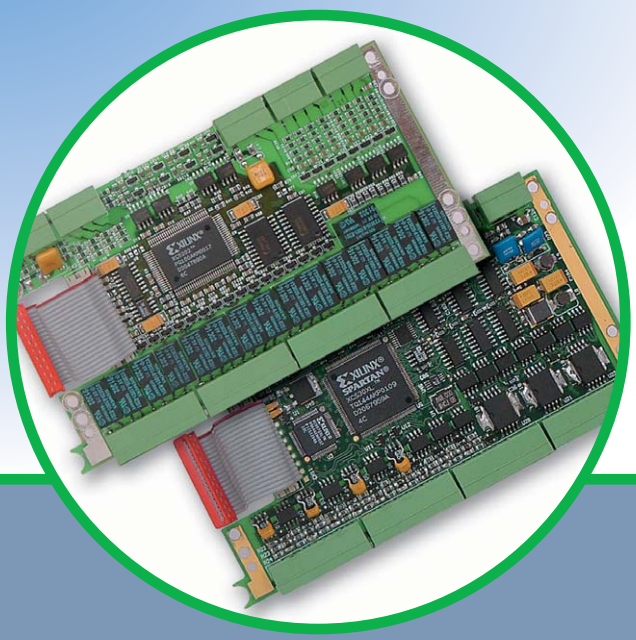
EXOR Embedded Technology

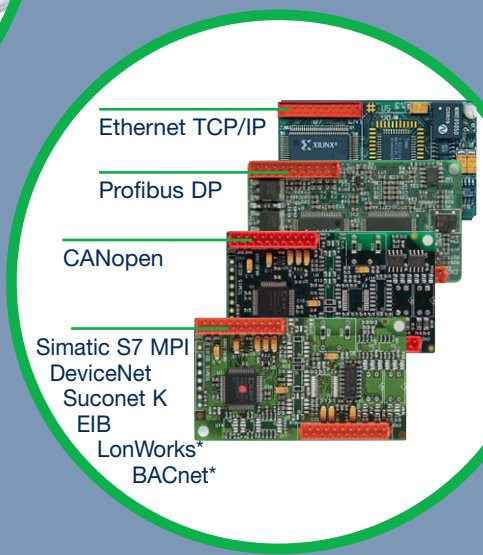
Flexible communication and customer-specific embedded technology have contributed to EXOR's high integration capability.

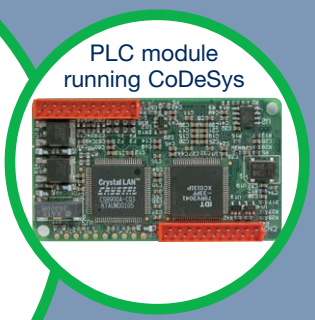
For many years now, all EXOR data entry systems have had a high level of integration capability because of the extensive offering of communication interfaces. EXOR's compatibility with the worldwide web, mobile phones, PLCs and the related communication standards such as XML or SOAP offer a highly flexible 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

cod. BRU001080501 - Subject to change without notice.