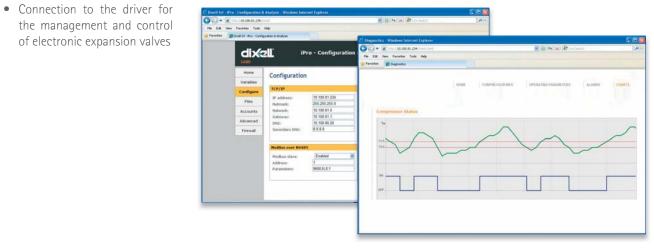


### IProgenius Series: General Applications High Connectivity

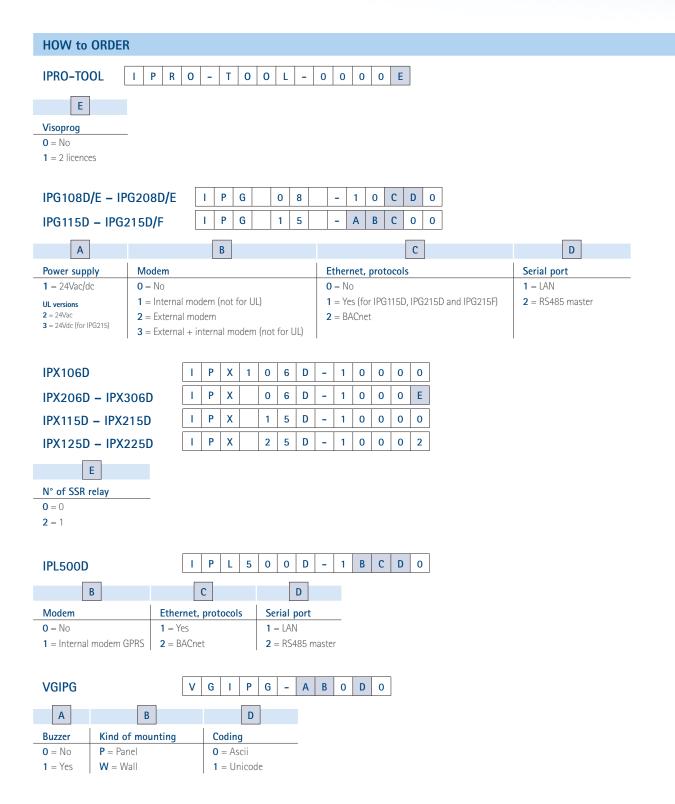
**iProGENIUS** is the Dixell family of programmable controllers that offers optimal solutions for all HVAC/R needs. They are suited for all applications in the PLC world including shopping centers, hospitals, airports, boatyards, energy management plants, and more. These controllers provide a high level of technology for ease of external connectivity and programmability providing simple answers for the user's needs, while offering local or remote monitoring control (accomplished with the powerful **iProLINK** connectivity module). An intuitive and useful HMI is also offered through the **VISOGRAPH** graphic display and the touch screen **TGIPG** display, while the expandability provided by the **IPX** modules allows use of these controllers with the most complex machinery.

- Powerful platform based on LINUX operative system on ARM9 (200MHz/32bit) microprocessor
- Internal Web Server with standard and customized Web Site
- Ethernet for connection to an intranet-internet network and to other controllers for a distributed application management
- USB output that allows the download of parameters, data/alarm log and the applications and parameters upload
- RS485 serial outputs for the connection to XWEB supervising and controlling systems or to applications developed by third Party Systems
- BACnet<sup>®</sup> communications allows the system to have easy and immediate integration with different manufactures ensuring complete interoperability
- Connection to the expansion modules to increase system capacity



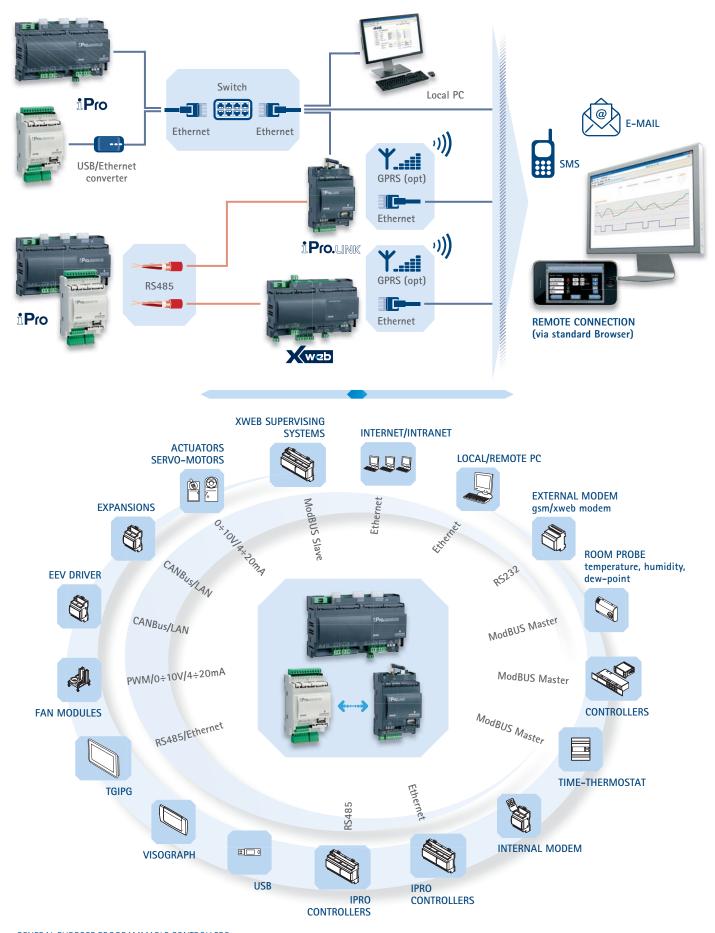
#### **MAIN FEATURES**

- CPU: 200MHz
- Processor 32bit
- RAM memory: 32MB (4 DIN Rail) 64MB (10 DIN Rail)
- Data storing on Flash memory: 32MB (4 DIN Rail)
- 128MB (10 DIN Rail, IPL500D)
- Power absorption: 40VA max (IPG on 4 DIN Rail)
  - 20VA max (IPG and IPX on 10 DIN Rail, IPL500D) 10VA max (IPX on 4 DIN Rail)



#### CONNECTIVITY

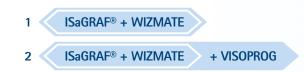
The high degree of connectivity that marks iProGENIUS controllers, ensures a complete local and remote unit/plant management.



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#### **DEVELOPMENT TOOL**

## **iProTOOL**

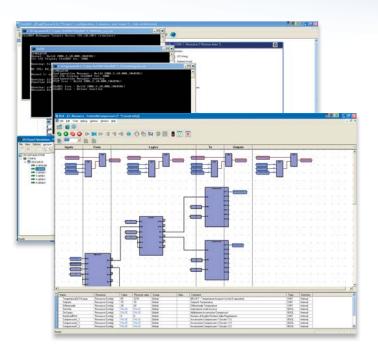


iPro-TOOL is a complete and easy to use tool that allows the user to work independently to create programs for iPro controllers, taking advantage of all the programmable series potential. The package includes manuals and the ISaGRAF®, WIZMATE and VISOPROG (optional) software.

The user can choose among 2 options listed above. Note: Wizmate can be used with iProRACK applications.

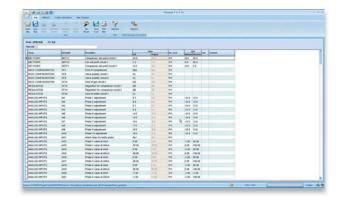
#### **ISaGRAF**®

ISaGRAF<sup>®</sup> is the standard, international and complete development environment selected by Dixell to create programs that will be uploaded into the iPro series. Also ideal for small applications, it can manage several I/O points, allows users to create control systems, and is supported all over the world. ISaGRAF<sup>®</sup> offers a combination of a highly portable, robust management engines (Virtual Machine) and an intuitive application development environment (Workbench). ISaGRAF<sup>®</sup> integrates the best system for simulation and remote debugging, supports the Flow Chart (FC: Flow Chart) and 5 different programming languages coded according to IEC61131 (SFC: Sequencial Function Chart; ST: Structured Text; FBD: Function Block Diagram; IL: Instruction List; LD: Ladder Diagram).



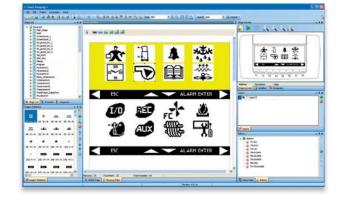
#### WIZMATE

WIZMATE is versatile software that has a fast and easy programming mode for iPro controllers (ideal for versions with the application included like the iProRACK).



#### VISOPROG

The VISOPROG is a tool that allows users to create the VISOGRAPH keyboard graphic interfaces. The program, installed on a PC, is connected to ISaGRAF<sup>®</sup> project and has a basic interface that users can easily customize depending on the requirements.



# **iProGENIUS**

## **PROGRAMMABLE CONTROLLERS with DISCONNECTABLE CONNECTORS**





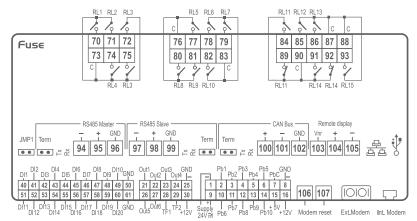
IPG108D	Programmable controller in 4 DIN Rail format with disconnectable + screw connectors
IPG108E	Programmable controller in 4 DIN Rail format with LED display and disconnectable + screw connectors
IPG115D	Programmable controller in 10 DIN Rail format with disconnectable connectors

FEATURES	IPG108D	IPG108E	IPG115D
Display		dual with icons	
Front led	24) /a a /ala firana TE40D	24) (coldo from TE40D	24Vaalda fram TE20D
Power supply	24Vac/dc from TF40D	24Vac/dc from TF40D	24Vac/dc from TF20D
Probe inputs			
0-1V, 0-5V, 0-10V, 0-20mA, 4-20mA, NTC, PTC, DI	6 x config	6 x config	10 x config
Digital inputs			
Optoinsulated	11 x config	11 x config	20 x config
Relay outputs			
Configurable	8 x 5A	8 × 5A	12 x 5A + 3 x 8A
Other outputs			
PWM			2 x config
0÷10V/4÷20mA	4 x config	4 x config	2 X Cornig
0÷10V			4
RS485	slave	slave	master + slave
USB	pres	pres	pres
External modem			GSM, analogue
LAN/RS485 master	pres	pres	
CANBus			pres
Ethernet	via USB-ETH-CONV	via USB-ETH-CONV	opt
Other			
Remote keyboard	1 x VGIPG	1 x GIPG	2 x VGIPG
Internal modem			analogue opt
Real time clock	pres	pres	pres
Flash memory	32MB	32MB	128MB
Connections	disconnectable + screw	disconnectable + screw	disconnectable
Connection kit	DWS30-KIT, IP-FC108	DWS30-KIT, IP-FC108	DWB30-KIT
Expansion modules	IPX115D, IPX125D, IPX306D	IPX115D, IPX125D, IPX306D	IPX106D, IPX115D, IPX125D
BACnet protocol	opt	opt	opt

#### IPG108D - IPG108E

Ç Ç RI RI RI 2 RI 3 RI 4 RI 5 [40] 41 42] 43] 44] 45 [46] 0 0 0 0 0 0 0	C C RIS RI7 RL8 47 [48] 49 [50] 51]
Remote display RS485 Vnr + + 60 61 62 63 64	Serial Port <b>65 66</b>
Pb1 Pb2 +12V Out1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Supply Pb4 Pb5 PbC ND Out4 24/36 Pb5 PbC Out3	DI1 DI3 DI5 1 DI2 DI4 DI6 20 21 22 23 24 25 26 27 28 29 30 31 DI8 DI10 GND DI7 DI9 DI10 DI10

#### IPG115D



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# PROGRAMMABLE CONTROLLERS with BAYONET CONNECTORS

# iProGENIUS

IPG208D	Programmable controller in 4 DIN Rail format with bayonet + screw connectors, ideal for the civil field
IPG208E	Programmable controller in 4 DIN Rail format with LED display and bayonet + screw connectors, ideal for the civil field
IPG215D	Programmable controller in 10 DIN Rail format with bayonet + screw connectors, ideal for the civil field
IPG215F	Programmable controller in 10 DIN Rail format with front LED and bayonet + screw connectors, ideal for the civil field

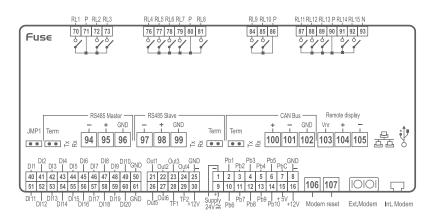


FEATURES	IPG208D	IPG208E	IPG215D	IPG215F
Display		dual with icons		
Front led				n° 5
Power supply	24Vac/dc from TF40D	24Vac/dc from TF40D	24Vac/dc from TF20D	24Vac/dc from TF20D
Probe inputs				
0-1V, 0-5V, 0-10V, 0-20mA, 4-20mA, NTC, PTC, DI	6 x config	6 x config	10 x config	10 x config
Digital inputs				
Optoinsulated	11 x config	11 x config	20 x config	20 x config
Relay outputs				
Configurable	8 x 5A	8 x 5A	15 x 5A	15 x 5A
Other outputs				
PWM				
0÷10V/4÷20mA	4 x config	4 x config	2 x config	2 x config
0÷10V			4	4
RS485	slave	slave	master + slave	master + slave
USB	pres	pres	pres	pres
External modem			GSM, analogue	GSM, analogue
LAN/RS485 master	pres	pres		
CANBus			pres	pres
Ethernet	via USB-ETH-CONV	via USB-ETH-CONV	opt	opt
Other				
Remote keyboard	1 x VGIPG	1 x VGIPG	2 x VGIPG	2 x VGIPG
Internal modem			analogue opt	analogue opt
Real time clock	pres	pres	pres	pres
Flash memory	32MB	32MB	128MB	128MB
Connections	bayonet + screw	bayonet + screw	bayonet + screw	bayonet + screw
Connection kit	IP-FC208	IP-FC208	IP-FC215CP	IP-FC215CP
Expansion modules	IPX206D, IPX215D, IPX225D	IPX206D, IPX215D, IPX225D	IPX206D, IPX215D, IPX225D	IPX206D, IPX215D, IPX225
BACnet protocol	opt	opt	opt	opt

#### IPG208D - IPG208E

Ç Ç RL1 RL2 RL3 RL4 RL5	Ç Ç RL6 RL7 RL8 47 [48] 49 [50 [51]
Remote display RS485 Vnr † 7 7 1 † 60 61 62 63 64	Serial Port <b>5</b> 66
Pb1 Pb3 +5V Out2 Pb1 Pb2 +12V Out1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 + Pb5 Pb5 GND Out4 24V = Pb5 Pb5 CND Out4	DI1 DI3 DI5 DI6 20 21 22 23 24 25 26 27 28 29 30 31 DI8 DI10 GND DI7 DI8 DI10 GND

#### IPG215D - IPG215F



**IPX** 

D: 10 DIN Rail

## EXPANSION MODULES with DISCONNECTABLE and BAYONET **CONNECTORS**



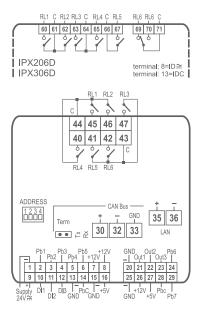


D: 10 DIN Rail

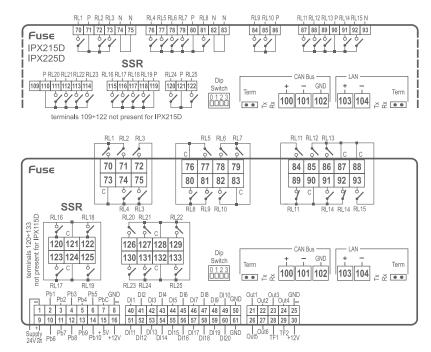
IPX106D	Expansion module in 4 DIN Rail format with disconnectable connectors and 6 relay outputs
IPX115D	Expansion module in 10 DIN Rail format with disconnectable connectors and 15 relay outputs
IPX125D	Expansion module in 10 DIN Rail format with disconnectable connectors and 25 relay outputs
IPX206D	Expansion module in 4 DIN Rail format with bayonet + screw connectors and 6 relay outputs
IPX215D	Expansion module in 10 DIN Rail format with bayonet + screw connectors and 15 relay outputs
IPX225D	Expansion module in 10 DIN Rail format with bayonet + screw connectors and 25 relay outputs
IPX306D	Expansion module in 4 DIN Rail format with disconnectable + screw connectors and 6 relay outputs

FEATURES	IPX106D	IPX115D	IPX125D	IPX206D	IPX215D	IPX225D	IPX306D
Power supply	24Vac/dc from TF10D	24Vac/dc from TF20D	24Vac/dc from TF20D	24Vac/dc from TF10D	24Vac/dc from TF20D	24Vac/dc from TF20D	24Vac/dc from TF10D
Probe inputs							
0-1V, 0-5V, 0-10V, 0-20mA, 4-20mA, NTC, PTC, DI	7 x config	10 x config	10 x config	7 x config	10 x config	10 x config	7 x config
Digital inputs							
Optoinsulated	3 x config	20 x config	20 x config	3 x config	20 x config	20 x config	3 x config
Relay outputs							
Configurable	6 x 5A	12 x 5A + 3 x 8A	18 x 5A + 3 x 8A + 4 x SSR	5 x 5A + 1 x 8A or 4 x 5A + 1 x 8A + 1 x SSR	15 x 5A	21 x 5A + 4 x SSR	5 x 5A + 1 x 8A or 4 x 5A + 1 x 8A + 1 x SSR
Other outputs							
0-10V/4-20mA		2 x config	2 x config		2 x config	2 x config	
0-10V	3	4	4	3	4	4	3
LAN CANBus	pres	pres	pres	pres	pres	pres	pres
Other							
Dip switch for address set	pres	pres	pres	pres	pres	pres	pres
Connections	disconnectable	disconnectable	disconnectable	bayonet + screw	bayonet + screw	bayonet + screw	disconnectable + screw
Connection kit	DWEX60-30KIT	DWX115-30KIT	DWEX70-30KIT	IP-FCEX60	IP-FCX215	IP-FCEX70	DWEX306-30KIT

#### IPX106D - IPX206D - IPX306D



#### IPX115D - IPX125D - IPX215D - IPX225D



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## **CONNECTIVITY MODULE**

# iProLINK

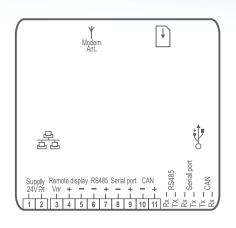
IPL500D

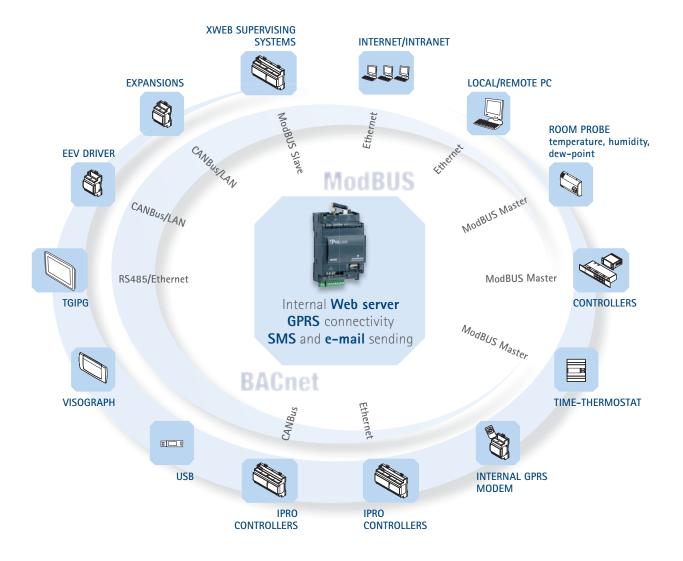
Programmable connectivity module designed to collect, store, process, and manage data. It is compatible with the iPro controllers and allows downloading of applications for data processing or management of other integrated devices



# D: 4 DIN Rail

FEATURES	IPL500D
Power supply	24Vac/dc from TF20D
Outputs	
RS485	slave
USB	pres
LAN/RS485 master	pres
CANBus	pres
Ethernet	pres
Other	
Remote keyboard	VGIPG
Internal modem	GPRS opt
Real time clock	pres
Flash memory	128MB
Connections	screw
Connection kit	IP-FC500
BACnet protocol	opt





# VISOGRAPH

## LCD GRAPHIC DISPLAY



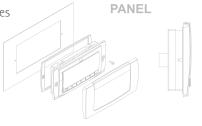
VGIPG

Graphic display fully programmable (via VISOPROG or through USB from the iPro) for iProGENIUS controllers with LCD graphic display with 240x96pixels

VG: 82x156mm

FEATURES	VGIPG
Power supply Visokey output	from controller
Visokey output	pres
Buzzer	opt

- Great versatility and extensive customization opportunities
- Complete integration with ISaGRAF® projects
- UNICODE character compatible
- Quick panel or wall mounting
- Up to 2 keyboards connectable with iPro controllers
- Maximum distance from the controller: 150m





#### **VISOPROG**

VISOPROG allows the creation of graphic interfaces for VISOGRAPH keyboards, VGIPG model. The program installed on a PC is connected to the ISaGRAF® project with a basic interface that can be easily customized based on the user's needs. VISOPROG allows a direct transfer of the user interface from PC to a keyboard. The image on the right shows an operative VISOPROG screen with the relative VISOGRAPH final interface



#### ACCESSORY

VISOKEY Programming kit for Visograph keyboards

