



# Product Configuration Simplified

## Eurotherm®

### iTools

A comprehensive suite of software tools with feature-specific editors that allow users to quickly configure, commission, monitor and maintain Eurotherm products.

[eurotherm.com/itools](http://eurotherm.com/itools)

 **WATLOW®**  
*Powered by Possibility*

# iTools Overview

## iTools Features

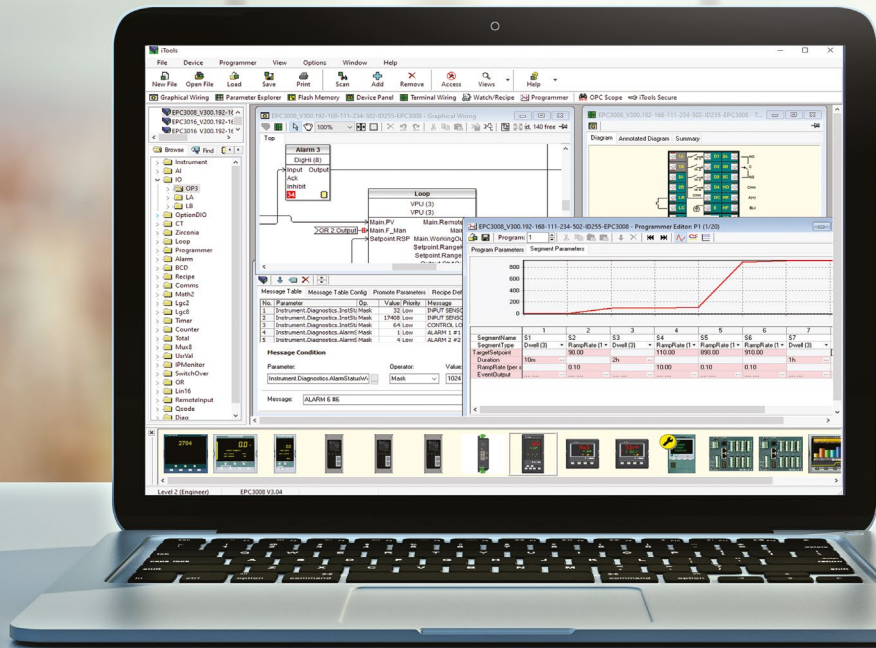
- Terminal Wiring Editor
- Parameter Explorer
- Graphical Wiring Editor
- Programmer Editor
- and more...

## Additional Features

- OPC Scope
- Basic SCADA
- Standalone Programmer Editor

## OPC DA2 Connectivity

- Eurotherm PAC
- System platform technologies
- LabVIEW™
- and more...



USB CPI CLIP

Modbus RTU Serial

MODBUS TCP via Ethernet



iTools free download [eurotherm.com/itools](http://eurotherm.com/itools)

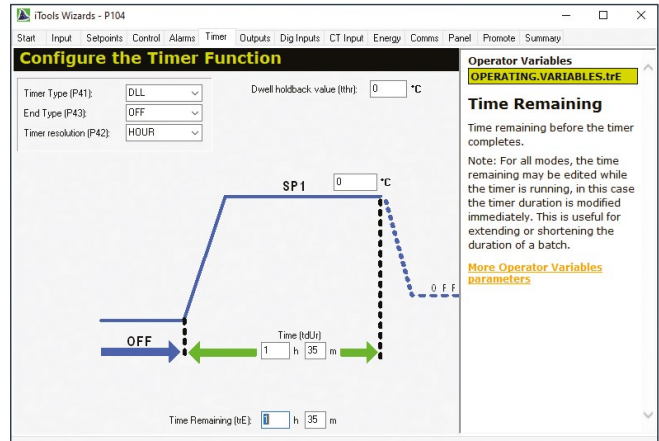
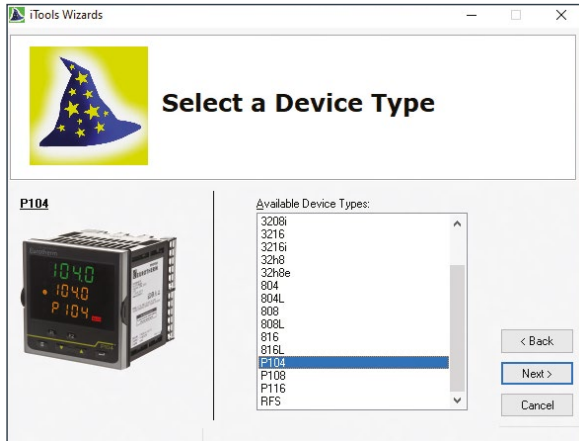
To purchase optional features contact us [www.eurotherm.com/contact-us](http://www.eurotherm.com/contact-us)



# iTools Features

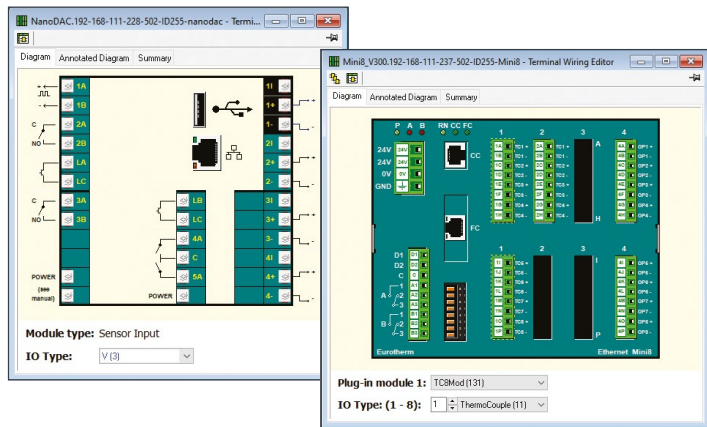
## Wizards

- Guided configuration of Eurotherm products
- Step-by-step sequence of pages
- Interactive help
- Graphical illustration of configuration settings



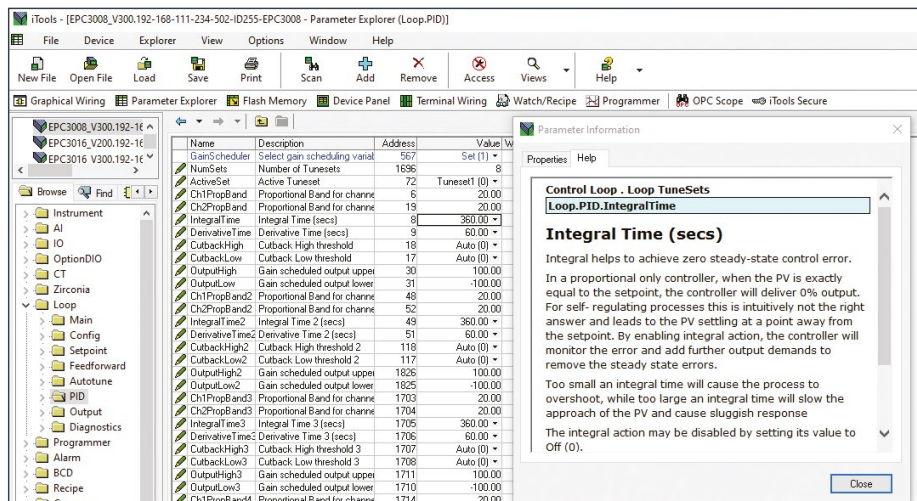
## Terminal Wiring Editor

- Representation of the I/O module terminal configuration
- Online view shows the actual I/O configuration of a device
- Offline view enables configuration of required I/O



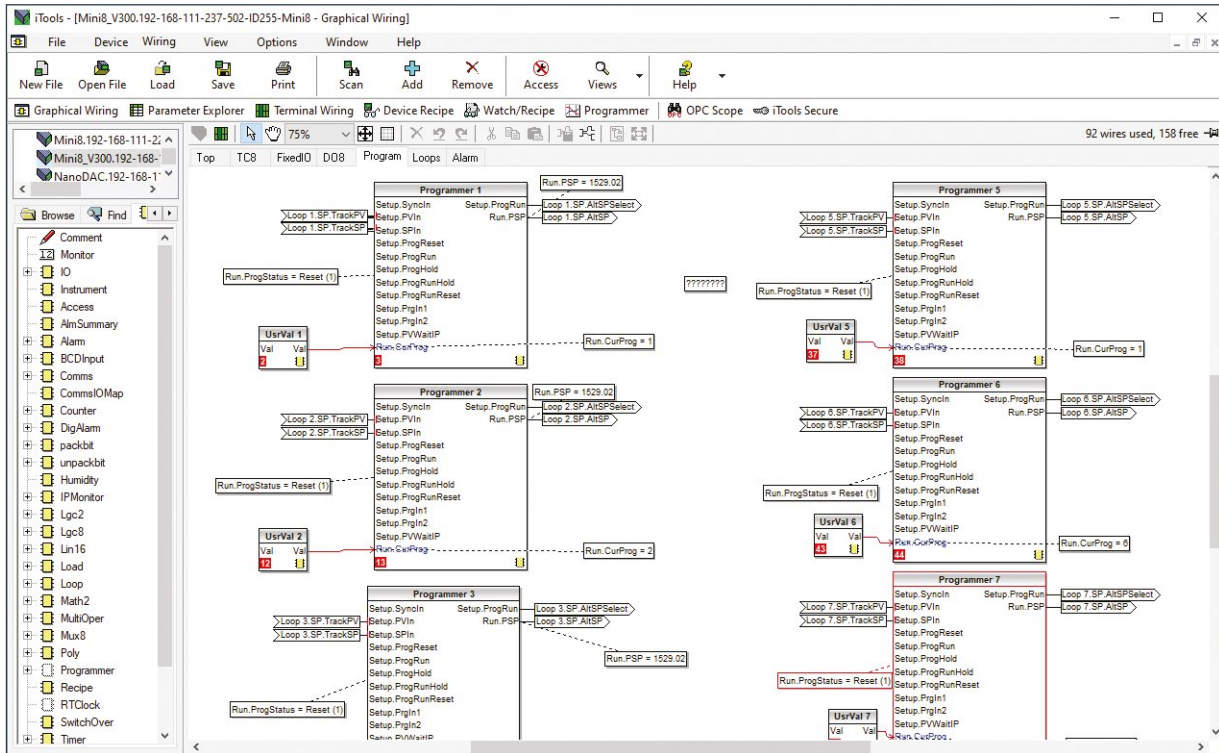
## Function Block Parameter Explorer

- Browse library of function blocks
- Function blocks include I/O, PID, communications, maths etc.
- View and modify parameters in Parameter List View
- Parameter Help



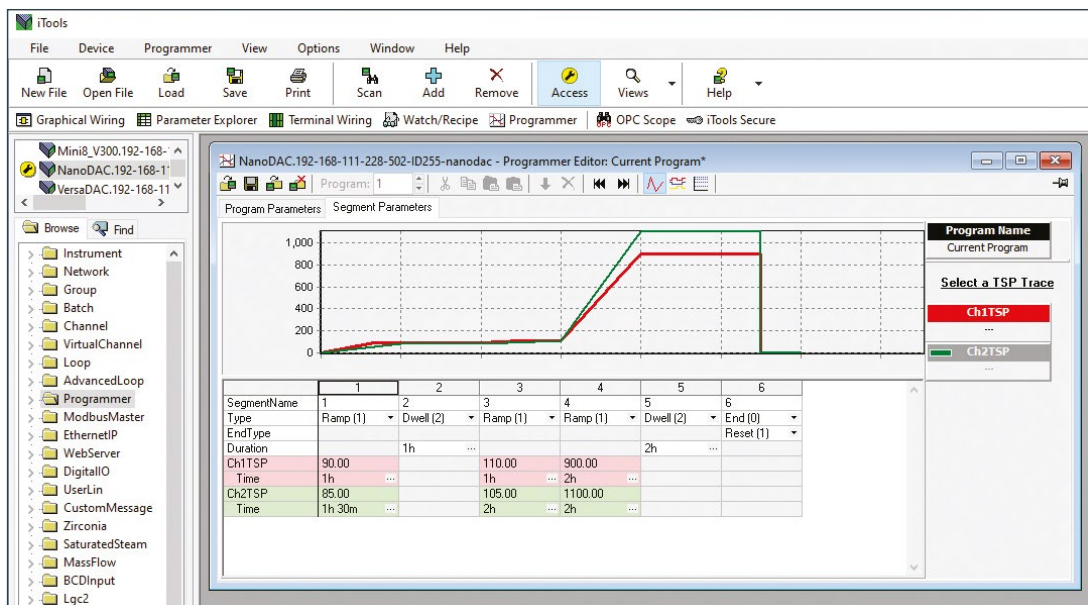
## Graphical Wiring Editor

- Build on preconfigured function blocks
- Develop advanced control applications in minutes
- Simple drag-and-drop graphical interface



## Programmer Editor

- Set up setpoint profiles
- Configure programmable event outputs
- Edit programs offline on a local PC, or an online device
- Download stored programs to device
- Store programs on local PC or device
- Stand-Alone Programmer Editor available for use by operators



## User Messages

- Define user messages
- Assign messages to parameter values

## Promote Parameters

- Identify priority parameters
- 'User List' displayed on the device front panel

## Device Recipes

- User defined list of parameters
- Create 'Data Sets' of parameter values to be downloaded and stored on the device

The screenshot shows the iTools Flash Memory Editor interface. The main window displays a table of parameters with columns for No., Parameter, Description, Level, Access, and Name. The 'Promote Parameters' dialog is open, showing the 'Parameter Promotion' section. The 'Parameter' field is set to 'Loop.Main.WorkingOutput', the 'Level' is 'Level 1 + 2', and the 'Access' is 'Read Only'. The 'Name' field is set to 'W.OUT'.

No.	Parameter	Description	Level	Access	Name
1	Loop.Main.WorkingOutput	Working Output (%)	Level 1 + 2	Read Only	W.OUT
2	Loop.Main.RemoteLoc	Remote or Local Setpoint	Level 1 + 2	Read/Write	R-L
3	Loop.Setpoint.SPHighLimit	SP1/SP2 upper limit	Level 2	Read/Write	SP.HI
4	Loop.Setpoint.SPLowLimit	SP1/SP2 lower limit	Level 2	Read/Write	SP.LO
5	Loop.Setpoint.SP1	Setpoint 1	Level 1 + 2	Read/Write	SP1
6	Loop.Setpoint.SP2	Setpoint 2	Level 1 + 2	Read/Write	SP2
7	Loop.Setpoint.SPRateUp	Setpoint up rate limit	Level 2	Read/Write	SP.UP
8	Loop.Setpoint.SPRateDown	Setpoint down rate limit	Level 2	Read/Write	SP.DWN
9	AI.1.PV	PV	Level 1 + 2	Read Only	AI1.PV
10	AI.2.PV	PV	Level 1 + 2	Read Only	AI2.PV
11	Loop.Autotune.AutotuneEnabl	Start an autotune	Level 2	Read/Write	TUNE
12	Loop.PID.Ch1PropBand	Proportional Band for channel	Level 2	Read/Write	PB.H
13	Loop.PID.Ch2PropBand	Proportional Band for channel	Level 2	Read/Write	PB.C
14	Loop.PID.IntegralTime	Integral Time (secs)	Level 2	Read/Write	TI
15	Loop.PID.DerivativeTime	Derivative Time (secs)	Level 2	Read/Write	TD

## Fieldbus IO Gateway Editor

- Define 'Input' and 'Output' parameters to be available over Fieldbus link (e.g. EtherNet/IP, PROFINET)

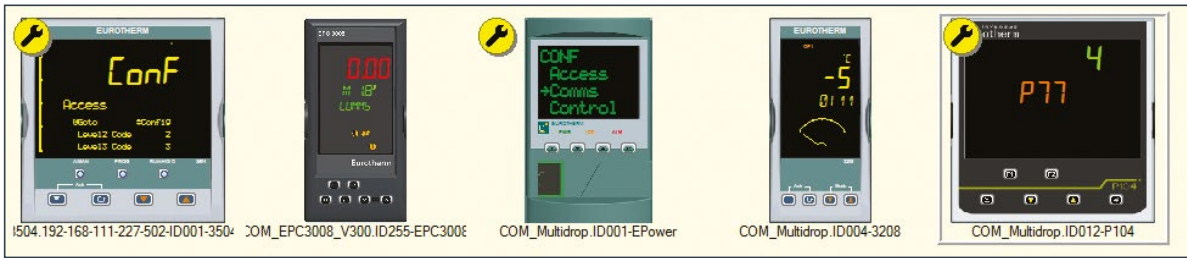
The screenshot shows the iTools Fieldbus I/O Gateway Editor interface. The main window displays a table of input and output definitions. The 'Input Definition' table is visible, showing columns for Name and Wired From. The 'Output Definition' table is also visible, showing columns for Name and Wired To. A graphical wiring diagram is shown on the right, illustrating the connection between the 'Network' block and the 'IO.AnalogIP' block.

Name	Wired From
Input01	Faultdet.AnyAlarm
Input02	Control.Main.PV
Input03	Control.Main.SP
Input04	Network.Meas.I
Input05	Network.Meas.V
Input06	Faultdet.AlarmStatus1
Input07	Faultdet.AlarmStatus2
Input08	(not wired)
Input09	(not wired)
Input10	(not wired)
Input11	(not wired)
Input12	(not wired)
Input13	(not wired)
Input14	(not wired)
Input15	(not wired)
Input16	(not wired)
Input17	(not wired)
Input18	(not wired)



## Device Panel

- Display a live interactive view of the device front panel



## Watch/Recipe Editor

- Monitor watch list of live parameter values
- Recipe definitions are stored in files on the PC and managed within iTools

List	Parameter	Description	Value	Set 1	Set 2	Set 3
Loop.1.Main	PV	Process Variable	122.73	40.75	15.00	31.18
Loop.1.Main	WorkingSP	Working Setpoint	122.91	63.08	15.00	53.19
Loop.1.Main	ActiveOut	Working Output	20.0	15.9	2.0	15.6
Loop.1.PID	ProportionalBan	Proportional Band	89.4	89.4	89.4	89.4
Loop.1.PID	IntegralTime	Integral Time	54	54	54	54
Loop.1.PID	DerivativeTime	Derivative Time	9	9	9	9
Loop.2.Main	PV	Process Variable	121.79	45.15	15.00	36.38
Loop.2.Main	WorkingSP	Working Setpoint	121.81	61.34	15.00	51.88
Loop.2.PID	ProportionalBan	Proportional Band	110.7	110.7	110.7	110.7
Loop.2.PID	IntegralTime	Integral Time	45	45	45	45
Loop.2.PID	DerivativeTime	Derivative Time	7	7	7	7

## User Pages

- Set up custom controller display
- Scrollable list of parameter values
- Display styles include bar graph, numeric and custom messages

The screenshot shows the iTools software interface. The main window is titled '3508.192-168-111-224-502-ID001-3508 - User Page Editor'. It features a menu bar (File, Device, Pages, View, Options, Window, Help) and a toolbar with icons for New File, Open File, Load, Save, Print, Scan, Add, Remove, Access, Views, and Help. The interface is divided into several sections: a left sidebar with a tree view of folders (Access, Instrument, IO, PV, LgcIO, RlyAA, ModIDs, AlmSummary, Comms, Commstab, Loop, Diag), a central preview window showing a Eurotherm device screen with 'Oven 1' and '349' displayed, and a right-hand configuration panel. The configuration panel includes a 'Main Display' field set to 'Loop.1.Main.PV', a 'Promote Parameter List (4 items)' table, and 'Selected User Page' and 'Selected Promote Parameter' sections.

Style	List	Parameter	User Text
(text only)			Oven 1
	IO.PV	PV	
	Loop.1.SP	SP1	Target
	Loop.1.OP	Ch1Out	Power

**Selected User Page:** Level: Level 1

**Selected Promote Parameter:** Item Nr: 3, Style: Single Row, Access: Lev 1 Alterable

**Promote Parameter Totals:** Used Items: 4, Free Items: 60

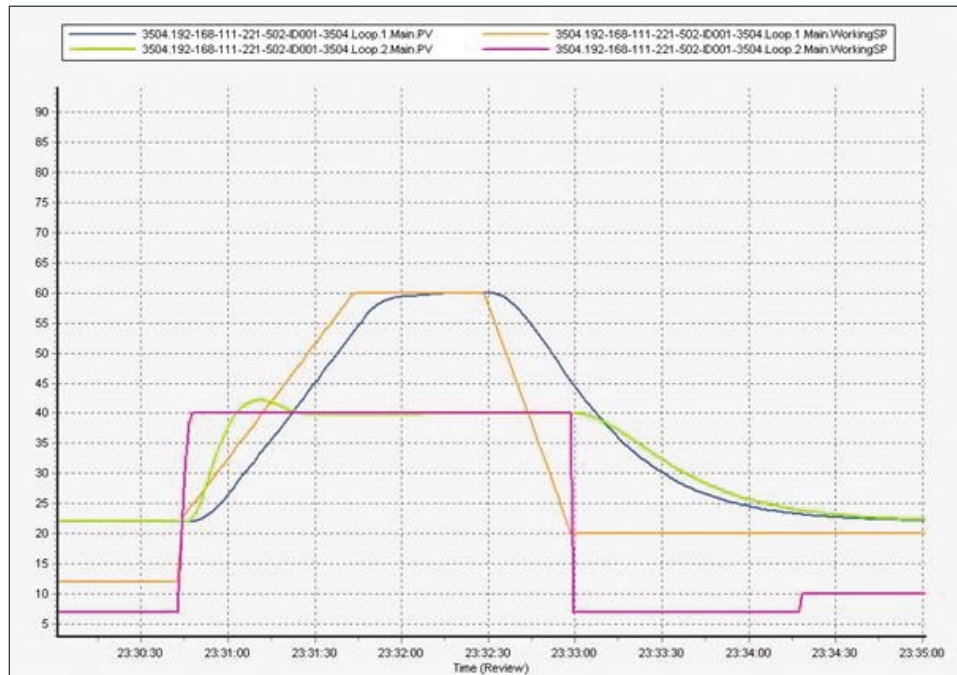
## Cloning

- Configurations defined using iTools can be saved to file on a local PC
- Saved configurations can be reloaded into a compatible device

# Optional Additional iTools Components

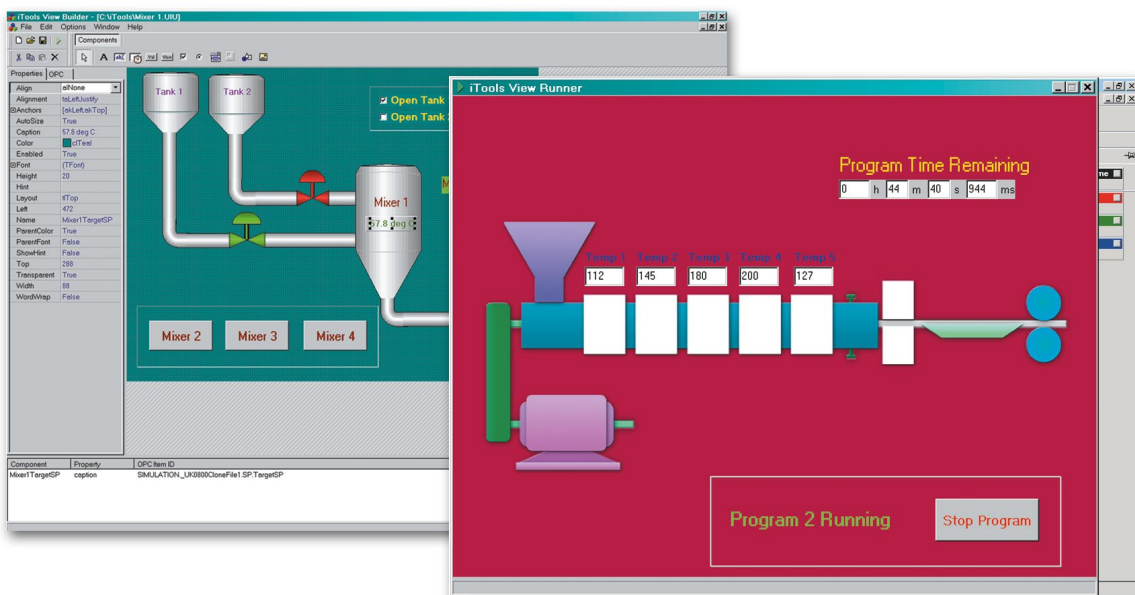
## OPC Scope

- An OPC explorer program that can connect to any OPC DA2 server
- Process monitoring
- Trending
- Data logging
- Watch Recipes
- View live data, with a scalable time axis between 1 minute and 1 month
- Historical review mode
- Data can be written onto the PC hard disk in CSV format and can be analyzed e.g., in an Excel Spreadsheet



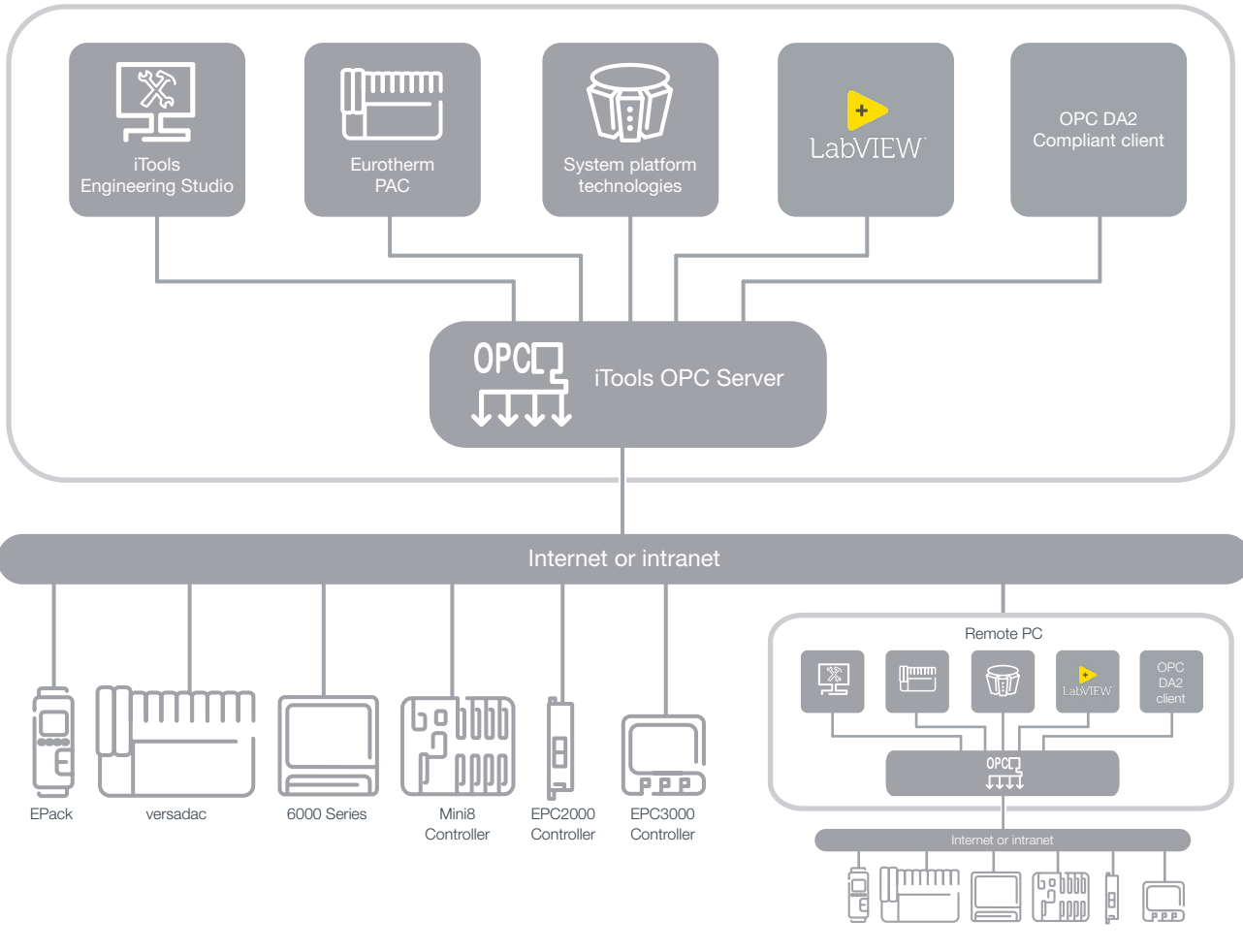
## View Builder / View Runner

- Basic SCADA
- Create custom screens
- Import background images
- User buttons to navigate between screens
- Live data monitoring
- Custom user interface to support process commissioning, diagnostics, monitoring and operation



## OPC Server

- OPC DA2 Server
  - Compatible with any OPC DA2 client:
    - Eurotherm PAC
    - System platform technologies
    - LabVIEW
- Supports
  - Modbus TCP over Ethernet
  - Modbus RTU Serial
- Modbus TCP to Modbus Serial gateway
  - Remote PC access via Internet/intranet to iTools OPC Server
- Automatic network scanning and device detection
- Can integrate any Modbus RTU/TCP communicating device
- Includes advanced communication diagnostic and monitoring tools



### Eurotherm

Faraday Close, Durrington  
 Worthing, West Sussex, BN13 3PL  
 Phone: + 44 (0)1903 268500

[www.eurotherm.com](http://www.eurotherm.com)

Contact your  
 local sales  
 representative



INVESTORS  
 IN PEOPLE

Document Number HA026177 Issue 7

Watlow, Eurotherm, EurothermSuite, EFit, EPack, EPower, Eyon, Chessell, Mini8, nanodac, piccolo and versadac are trademarks and property of Watlow its subsidiaries and affiliated companies. All other trademarks are the property of their respective owners.

©Watlow Electric Manufacturing Company. All rights reserved.

