

# ULTRA INSTRUMENTS

PLC · HMI · SERVO · VFD · PID

Industrial Automation Controllers & Machine Solutions

## PRODUCT CATALOG 2025

**20,000+**

PLC INSTALLED

**25 Yrs**

OF EXPERIENCE

**4000 sq ft**

MANUFACTURING

**24x7**

CUSTOMER SUPPORT

Established in 2001 under the leadership of **Mr. Utpal Shah**, Ultra Instruments manufactures high-quality controllers for machine automation, process control, and laboratory applications. Trusted by 20,000+ installations across India.

### APPLICATIONS

● PET Blowing	● Blow Moulding	● Injection Moulding	● Form Fill Seal
● Cut to Length	● Flour Mills	● R.O. Plant	● Rubber Moulding
● Vacuum Forming	● Car Parking	● HVAC	● Printing Machines
● Brewing Plant	● Cold Storage	● Elevators	● Home Automation

# Why Choose Ultra Instruments?

Ultra Instruments has been at the forefront of industrial automation since 2001. We design, develop and manufacture PLC-based controllers that are built to survive harsh industrial environments. With over 20,000 installations and 25 years of expertise, we deliver reliability you can count on — backed by 24x7 support.

<b>■ Customized Solutions</b> Tailored electronics solutions to meet the unique needs of each client — no one-size-fits-all.	<b>■ Rapid Prototyping</b> Quick turnaround for developing prototypes and testing concepts — your timeline matters.
<b>◆ Cutting-Edge Technology</b> Latest innovations in electronics development, from PLC to servo drives to touchscreen HMIs.	<b>■ Expert Engineering Team</b> Highly skilled engineers with deep domain expertise in automation and process control.
<b>■ Quality Assurance</b> Rigorous QC processes and built-in diagnostics for easy troubleshooting at your site.	<b>■ Cost-Effective</b> Competitive pricing on every product without compromising on quality or reliability.
<b>■ 24x7 Customer Support</b> Round-the-clock support via phone and WhatsApp — we are always there when you need us.	

## OUR ESTEEMED CLIENTS

✓ Patanjali	✓ Jagmohan Pla-Mach Pvt. Ltd.	✓ Suraj (Pioneers in Plastics)	✓ Aryan Industries
✓ Micro Tools	✓ Shri Vishvakarma Industries	✓ Ranasons	✓ Global PET Industries Pvt. Ltd.

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**SBM - 01**



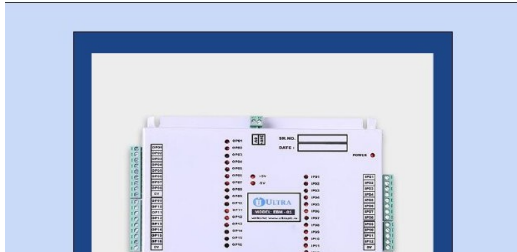
Inputs / Outputs	<b>8 Inputs / 12 Outputs</b>
Heating Zones	<b>8 Zones</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
Heater Support	<b>230V / 440V Infrared</b>
HMI	<b>7" / 10" Touch Screen</b>
SSR	<b>25A / 50A SSR + 4.5–10A SMPS</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

<ul style="list-style-type: none"> <li>■ 8 Heating zones with SSR control</li> </ul>	<ul style="list-style-type: none"> <li>■ Supports 230V &amp; 440V infrared heaters</li> </ul>
<ul style="list-style-type: none"> <li>■ 7" or 10" colour touchscreen HMI</li> </ul>	<ul style="list-style-type: none"> <li>■ 30 mould programme memory</li> </ul>
<ul style="list-style-type: none"> <li>■ Hourly, daily &amp; monthly production records</li> </ul>	<ul style="list-style-type: none"> <li>■ PNP-type digital inputs</li> </ul>
<ul style="list-style-type: none"> <li>■ 24V DC outputs rated 2A each</li> </ul>	<ul style="list-style-type: none"> <li>■ Built-in diagnostics for site troubleshooting</li> </ul>



**EBM - 01**



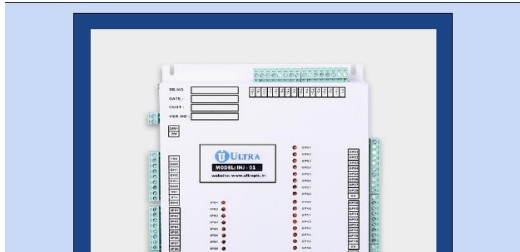
Inputs / Outputs	<b>12 Inputs / 16 Outputs</b>
Thermocouple Zones	<b>8 Zones</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI	<b>7" / 10" Touch Screen</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

■ 12 digital inputs / 16 digital outputs	■ 8-zone thermocouple temperature control
■ 7" or 10" colour touchscreen HMI	■ 30 mould programme memory
■ Hourly, daily & monthly production data	■ PNP-type digital inputs — 24V DC
■ 24V DC outputs rated 2A each	■ Easy site troubleshooting with built-in diagnostics



**INJ - 01**



Inputs / Outputs	<b>16 Inputs / 24 Outputs</b>
Thermocouple Zones	<b>8 Zones</b>
Analog I/O	<b>3 Analog Inputs + 2 Analog Outputs</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI	<b>7" / 10" Touch Screen</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

■ 16 digital inputs / 24 digital outputs	■ 8-zone thermocouple temperature control
■ 3 analog inputs + 2 analog outputs	■ 7" or 10" colour touchscreen HMI
■ 30 mould programme memory	■ Complete production data logging up to 1 year
■ PNP-type inputs — all outputs 24V DC @ 2A	■ Built-in diagnostics for easy field troubleshooting



**INJ- 02**



Inputs / Outputs	<b>24 Inputs / 32 Outputs</b>
Thermocouple Zones	<b>8 Zones</b>
Analog I/O	<b>3 Analog Inputs + 2 Analog Outputs</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI	<b>7" / 10" Touch Screen</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

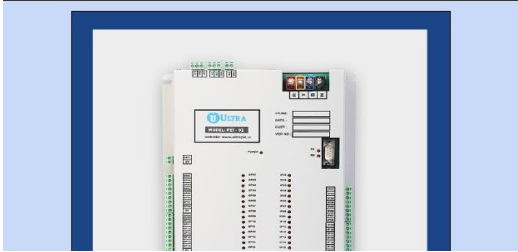
■ 24 digital inputs / 32 digital outputs — larger machines	■ 8-zone thermocouple temperature control
■ 3 analog inputs + 2 analog outputs	■ 7" or 10" colour touchscreen HMI
■ 30 mould programme memory	■ Full production reporting up to 1 year
■ Expanded I/O for complex machine sequences	■ All outputs 24V DC rated @ 2A each

# MODEL PET-01

FULLY AUTO PET



PET - 01



Inputs / Outputs	<b>24 Inputs / 24 Outputs</b>
Heating Zones	<b>8 Zones</b>
Heater Support	<b>230V / 440V Infrared</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI + SSR	<b>7" / 10" HMI + 25A/50A SSR + 4.5–10A SMPS</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

## KEY FEATURES

■ 24 digital inputs / 24 digital outputs	■ 8 heating zones — 230V/440V infrared heater support
■ 7" or 10" touchscreen HMI included	■ 25A/50A SSR + 4.5–10A SMPS included
■ 30 mould programme memory	■ Full production data history up to 1 year
■ PNP-type digital inputs	■ Built for fully automated PET stretch-blow lines



**PET - 02**



Inputs / Outputs	<b>16 Inputs / 16 Outputs</b>
Heating Zones	<b>8 Zones</b>
Heater Support	<b>230V / 440V Infrared</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI + SSR	<b>7" / 10" HMI + 25A/50A SSR + 4.5–10A SMPS</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

■ 16 digital inputs / 16 digital outputs — compact model	■ 8 heating zones with 230V/440V infrared heater support
■ 7" or 10" colour touchscreen HMI	■ 25A/50A SSR + 4.5–10A SMPS bundled
■ 30 mould memory — quick recipe switching	■ Hourly, daily & monthly production records
■ PNP inputs — all 24V DC @ 2A outputs	■ Ideal for single-stage automatic PET machines



**PET - 03**



Inputs / Outputs	<b>32 Inputs / 32 Outputs</b>
Heating Zones	<b>8 Zones</b>
Heater Support	<b>230V / 440V Infrared</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI + SSR	<b>7" / 10" HMI + 25A/50A SSR + 4.5–10A SMPS</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

■ 32 digital inputs / 32 digital outputs — high-I/O model	■ 8 heating zones with 230V/440V infrared heater support
■ 7" or 10" colour touchscreen HMI	■ 25A/50A SSR + 4.5–10A SMPS bundled
■ 30 mould memory for multi-product lines	■ Full production data logging for 1 year
■ Suits complex multi-cavity PET blowing lines	■ All I/Os rated 24V DC @ 2A



PET - 04



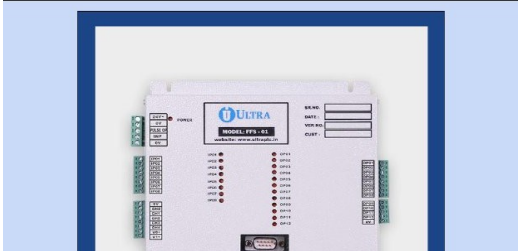
Inputs / Outputs	<b>16 Inputs / 24 Outputs</b>
Heating Zones	<b>8 Zones</b>
Heater Support	<b>230V / 440V Infrared</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI + SSR	<b>7" / 10" HMI + 25A/50A SSR + 4.5-10A SMPS</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

■ 16 inputs / 24 outputs — flexible mid-range model	■ 8 infrared heating zones (230V or 440V)
■ 7" or 10" colour touchscreen HMI	■ SSR and SMPS included in package
■ 30 mould programme memory	■ Hourly, daily & monthly production reporting
■ PNP inputs — 24V DC outputs @ 2A each	■ Built for automatic PET blowing applications



**FFS - 01**



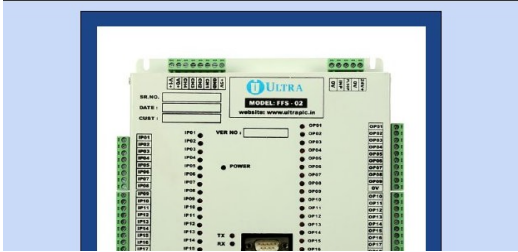
Inputs / Outputs	<b>8 Inputs / 12 Outputs</b>
Thermocouple Zones	<b>4 Zones</b>
Analog Input	<b>2 Analog Inputs</b>
High Speed I/O	<b>1 High Speed (250KHz) O/P + 1 High Speed I/P</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI	<b>7" Touch Screen + 4.5–10A SMPS</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

■ 8 inputs / 12 outputs with 4-zone thermocouple	■ 2 analog inputs for sensor integration
■ 1 high-speed output (250KHz) + 1 high-speed input	■ 7" colour touchscreen HMI
■ 4.5–10A SMPS included	■ 30 mould memory for multiple product formats
■ Full production data history up to 1 year	■ Designed for FFS packaging machine control



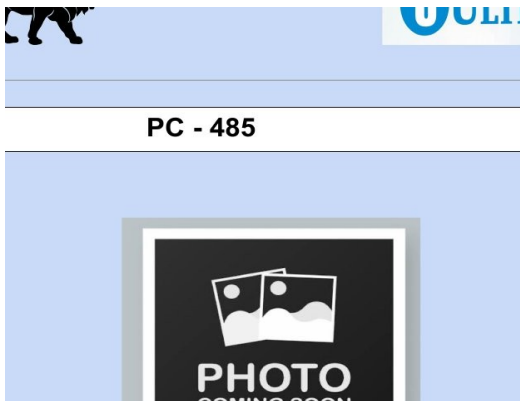
**FFS - 02**



Inputs / Outputs	<b>17 Inputs / 18 Outputs</b>
Thermocouple Zones	<b>4 Zones</b>
Analog Output	<b>2 Analog Outputs</b>
High Speed I/O	<b>1 High Speed (250KHz) O/P + 1 High Speed I/P</b>
I/O Voltage	<b>24V DC @ 2A each</b>
Input Type	<b>PNP Type</b>
HMI	<b>7" Touch Screen + 4.5–10A SMPS</b>
Mould Memory	<b>30 Moulds</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

### KEY FEATURES

■ 17 inputs / 18 outputs — screen printing + cutting	■ 4-zone thermocouple temperature control
■ 2 analog outputs for drive control	■ 1 high-speed output (250KHz) + 1 high-speed input
■ 7" colour touchscreen HMI	■ 30 mould memory for multi-product setups
■ Full production logs up to 1 year	■ Precision control for length cutting applications



Type	<b>Standalone PID Temperature Controller</b>
Application	<b>PET Machines — Infrared Heater Control</b>
Communication	<b>RS485 with Modbus Protocol</b>
HMI Connection	<b>Connect to HMI via RS485</b>

### KEY FEATURES

■ Standalone temperature control unit for PET machines	■ RS485 communication with Modbus protocol
■ Connect directly to any HMI via RS485	■ Designed for infrared heater zone control
■ Compact form factor — easy DIN rail mounting	■ Ideal as add-on to existing PET machine installations

# MODEL MULTIPOINT PARISON CONTROLLER

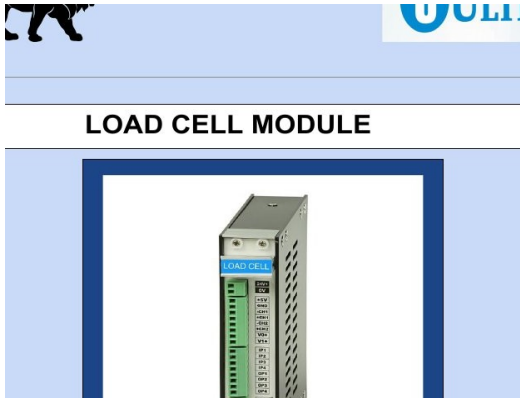
PARISON CONTROL



Models	<b>100-Point Parison   200-Point Parison</b>
Point Setting	<b>Each point individually settable</b>
Master Points	<b>Any point can become Master</b>
Mould Memory	<b>30 Moulds with Graph Data + Master Points</b>
HMI	<b>7" / 10" / 15" Touch Screen + 4.5–10A SMPS</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

## KEY FEATURES

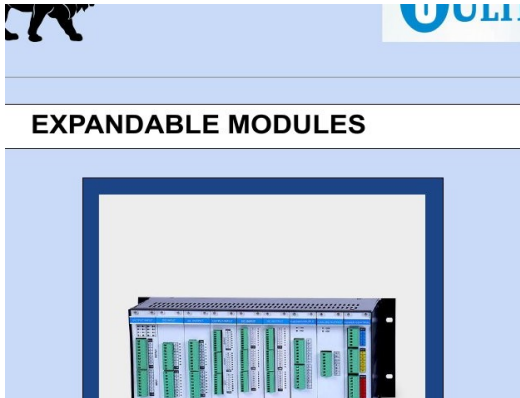
■ 100-point and 200-point parison models available	■ Every individual point is independently settable
■ Any point can be assigned as a Master reference	■ 30 mould memory with graph data visualization
■ Available with 7", 10" or 15" touchscreen HMI	■ Hourly, daily & monthly production data
■ Ideal for complex multi-layer blow moulding	■ Real-time graph display on HMI



Load Cell Channels	<b>2 Channel Load Cell Module</b>
Digital Outputs	<b>4 Digital (Open Collector)</b>
Digital Inputs	<b>4 Digital (PNP Type)</b>
Analog Outputs	<b>2 × 0–10V Analog Outputs</b>
Communication	<b>RS485 with Modbus Protocol</b>
ADC Resolution	<b>Internal 24-bit ADC</b>
HMI	<b>7" Touch Screen + 4.5–10A SMPS</b>
Mould Memory	<b>30 Programmes</b>
Production Data	<b>Hourly / Daily / Monthly — up to 1 Year</b>

## KEY FEATURES

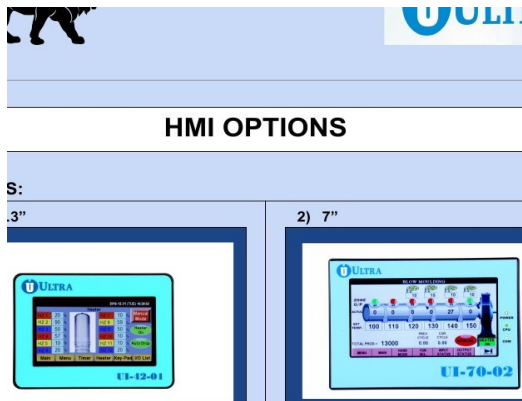
■ 2-channel load cell signal conditioning	■ 24-bit internal ADC for high-precision measurement
■ 4 digital open-collector outputs	■ 4 digital PNP-type inputs
■ 2 analog outputs (0–10V) for downstream control	■ RS485 Modbus — easy PLC/SCADA integration
■ 7" touchscreen HMI included	■ Production records for up to 1 year



Max Digital Inputs	<b>128 Digital Inputs</b>
Max Digital Outputs	<b>128 Digital Outputs</b>
Max Analog Inputs	<b>64 Analog Inputs</b>
Max Analog Outputs	<b>32 Analog Outputs</b>
Zone Power Control	<b>32 Zones</b>
High Speed Output	<b>1 High Speed Output</b>

## KEY FEATURES

<ul style="list-style-type: none"> <li>■ Scale up to 128 digital inputs and 128 digital outputs</li> <li>■ 32-zone power control capability</li> <li>■ DIN-rail modular design — easy system expansion</li> <li>■ Mix-and-match modules for exact I/O requirements</li> </ul>	<ul style="list-style-type: none"> <li>■ 64 analog inputs + 32 analog outputs maximum</li> <li>■ 1 dedicated high-speed output channel</li> <li>■ Compatible with all Ultra PLC base units</li> <li>■ Industrial-grade — built for harsh environments</li> </ul>
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Models Available	4.3"   7"   10"   15"
Display Type	Colour Touchscreen TFT
Communication	RS485 / RS232 / USB
Compatibility	All Ultra PLC & Controller Models

## KEY FEATURES

■ 4 sizes: 4.3", 7", 10" and 15" colour touchscreen	■ Intuitive operator interface with custom screens
■ Recipe and production data management	■ Real-time monitoring and alarm display
■ RS485/RS232/USB communication	■ Compatible with all Ultra PLC and controller models
■ Rugged industrial housing	■ Easy field installation and configuration

# Ready to automate your process?

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## MANUFACTURING PLANT

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Wagle Industrial Area, Thane West — 400604

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