

# TBB 6500

## ADVANCED TEXTILE DYEING CONTROLLER

TBB 6500 is a batch controller especially designed and developed for the full automation of all types of textile dyeing machines and is capable of fulfilling all the functions required in modern dyeing procedures. .

TBB 6500 is the first and -for the time being- the only batch controller in the market, that provides programming and data safety of Linux operating system.

TBB 6500 has Open PLC (IEC61131-3 standard) language support. Users and textile machine manufacturers can write their own specific functions and process commands according to the machine properties and requirements.

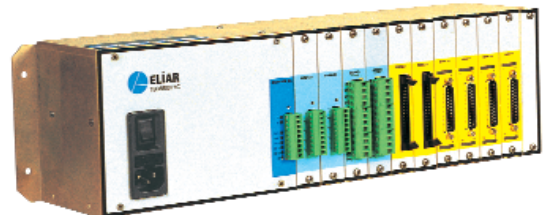
TBB 6500, an extremely flexible, modular and reliable controller that comes with Eliar's 20 years of industrial automation know-how and experience, has been completely developed by the Eliar's R&D team and is manufactured in our own production facilities.



### Specifications

- Fast and easy programming
- Unlimited number of functions with Open PLC support in IEC61131-3 standard
- Unlimited number of program steps
- Program and data protection with Linux operating system and open-ended design
- 256 colors 320x240 LCD graphic monitor
- Extendable input/output structure
- Easy mounting with 2 parts structure (OPTERM+PLC)
- Graphical reporting and interactive machine monitoring
- Data logging of dyeing process
- Multilingual
- Direct connection to LAN
- Internet connectivity
- Monitoring real-time process and variables
- Software version updates and service support
- Remote access
- Competitive price for best performance

Input/output	Maximum
Digital Input (On/off 5-24 V DC)	64
Counter Input (1 Khz 5-24 V DC)	4
Digital Output (24 V AC/DC 1A)	64
Analog Input (0/4-20 mA)	10
Analog Input (Pt -100)	8
Analog Output (4-20 mA)	16



Thanks to "Optimization Calculator" feature, program parameters (temperature, time, level etc.) can be changed dynamically accordance with "Batch Start Information" (quality, color, customer etc.) which includes user defined formulas for a variety parameters. In addition, "Parametric Programming" facility simplifies programming by enabling the user to select the relevant I/O in a single command. This prevents to memorize separate commands for each single function.

TBB 6500 which has open-ended system architecture is compatible with all kinds of dyeing machines. Specific functions and interlocks can be written by the user, based on machine properties and requirements. There is unlimited function flexibility in IEC61131-3 standard with the language support of Open PLC.

## Programming Features

- **Fast and easy programming with "Program Optimization" feature. Saving of running program with runtime optimized parameters.**
- **Auto regulation and passage based commands.**
- **Easy change of runtime parameters.**
- **Cost savings by controlling process of coupled and sequential operations.**
- **Semi-automatic control using commands with instant parameters.**

<b>Operating System</b>	Linux 2.4.9	<b>Interlocks</b>	100 on site
<b>Program Steps</b>	Unlimited (Dynamic)	<b>PLC Programming Language</b>	Unlimited with Open PLC
<b>Process Commands</b>	Unlimited	<b>Passwords</b>	IEC61131-3 standard
<b>Parallel Processing</b>	16		10

## Configurations

	Digital Output	Digital Input	Analog Output	Analog Input
<b>PLC (64/64/16/16)</b>	<b>64</b>	<b>64 + 4 Counter</b>	<b>16</b>	<b>16</b>

## Technical Specifications

<b>Operating Voltage</b>	24 V DC (-%15 / %20)	<b>I/O Unit</b>	On PLC
<b>Power Consumption</b>	Opterm 15 W, PLC 30 W	<b>Keyboard</b>	Industrial type membrane with 29 keys
<b>Operating Temperature</b>	0-50 °C	<b>Display</b>	320 X 240 256 colors LCD
<b>Humidity</b>	% 10-85 (non-condensed)	<b>Program and calibration data downloading</b>	PC
<b>Isolation</b>	2000 V (digital), 500 V (analog)	<b>Communication</b>	2 x RS 232, 10 mbps ethernet
<b>Analog Calibration</b>	Inputs-Pt100, mA (0-20,4-20) Outputs mA (0-20, 4-20)	<b>Memory</b>	32 MB 16 MB Flash Disk (standard), max. 256MB
		<b>Real-time clock</b>	Yes