HSRIO

HIGH SPEED REMOTE INPUT OUTPUT

Nome documento:	**Hsrio_Brochure.doc**
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1 DESCRIPTION

Remote modular system IO high speed, high performance, economic.

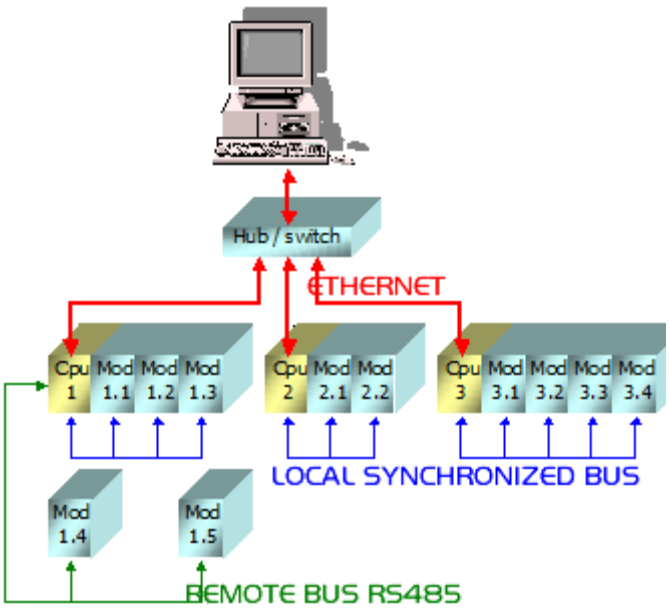
The system, from now reported with **HSRIO**, it allows the management of I/O remote from **PC** trough connection LAN to high speed.

For remote I/O on intends a whole series of intelligent unity devoted to input functions logical and analogical output, control motor, reading encoder, etc…

The choice of the connection type LAN allows to get two important performances:

- Standard interface, that doesn't ask for additional hardware for the connection with PC because everyone is already equipped.
- High speed data transfer

2 OPERATING STRUCTURE



2.1 ETHERNET BUS 10/100 MHZ RJ45:

- Very High speed protocol: 0,2 ms / CPU (ex: 5.120 input and 2.560 digitals output in 1 ms)
- Up to 250 CPU
- Up to 16 local and remote modules for CPU (up to 128.000 digital input e 64.000 digital output in 50 ms)
- Optional fiber optic connection
- Optional wireless connection (in case of not critical application)
- Optional Internet connection (in case of not critical application)
- Ethernet network usable by other applications (in case of not critical application)

2.2 HARDWARE:

- 24 Vdc Power supply
- DIN rail assembly
- Extremely compact: 24-48 x 100 x 120 mm (w x h x l)
- Screw Clamp Terminal blocks and D-shell connectors (counters only)
- Economic, easy, hardy and fast system wiring

2.3 SOFTWARE (OPTIONAL)

- Configuration and test tools
- Windows® e RTX® Drivers
- Softlogic, Motion control e SCADA hiPlc®

2.4 SICUREZZA

- Flash memory holds systems configuration
- Configurable outputs Watchdog

2.5 APPLICATIONS

- multi axes and high speed machines
- packaging, palletts handlers
- cartesian robots
- automatic storing machines
- building automation

3 HARDWARE: MODULES AVAILABLE

Subsequently some of the modules available are listed.

3.1 RMMA10 CPU MODULE

- 32 digital inputs 24 Vdc PNP
- 16 digital outputs 24 Vdc 100 mA PNP
- **Physical dimensions :**48 x 100 x 120 mm (w x h x l)

3.2 RMIO10 LOCAL SLAVE MODULE SYNCHRONOUS

- 32 digital inputs 24 Vdc PNP
- 16 digital outputs 24 Vdc 100 mA PNP
- 2 counters 1 channel 24 Vdc 400 kHz (use digital inputs)
- **Physical dimensions:** 48 x 100 x 120 mm (w x h x l)

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3.3 RMAD10 LOCAL SLAVE MODULE SYNCHRONOUS

- 24 digital inputs 24 Vdc PNP
- 12 digital outputs 24 Vdc 100 mA PNP
- 4 ianalog inputs ±10 Vdc o ±20 mA 12 bit
- 2 analog outputs ±10 Vdc 12 bit
- **Physical dimensions :** 48 x 100 x 120 mm (w x h x l)

3.4 RMEN10 LOCAL SLAVE MODULE SYNCHRONOUS

- 16 digital inputs 24 Vdc PNP
- 14 digital outputs 24 Vdc 100 mA PNP
- 1 encoder 3 differential channels 500 kHz
- 1 encoder 3 differential channels 100 kHz
- 1 encoder 1 differential channel 500 kHz
- 2 encoders 1 channel 24 Vdc 100 kHz (use digital inputs)
- 2 analog outputs ±10 Vdc 12 bit
- **Physical dimensions** :48 x 100 x 120 mm (w x h x l)

3.5 RMMT10 REMOTE SLAVE MODULE RS485 HOUSED CLOSE TO DC MOTOR

- 8 digital inputs 24 Vdc PNP
- 4 digital outputs 24 Vdc 100 mA PNP
- 1 encoder 3 differential channels 500 kHz
- 1 analog output ±24 Vdc 6A
- **Physical dimensions** :24 x 100 x 120 mm (w x h x l)

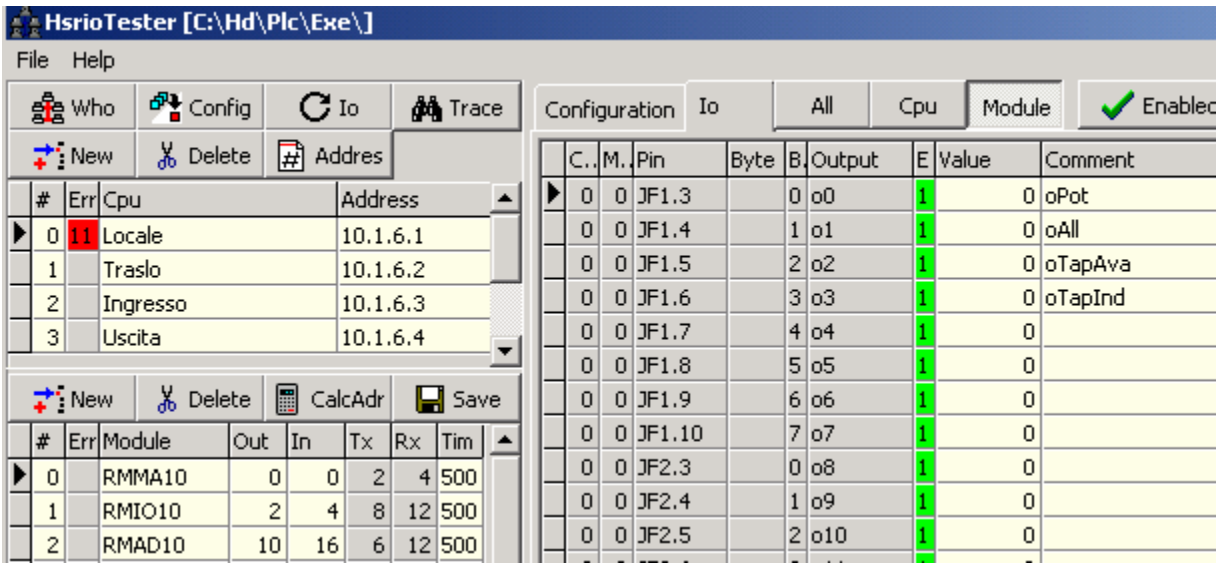
4 SOFTWARE (OPTIONAL)

Our "mindset" it is the opening towards any integrator.

We don't bind anyone to purchase our softwares.

We are able to provide software and hardware assistance for the systems integration of our modules. Ours wants to be a flexible solution to 360° in the world of the Industrial Automation.

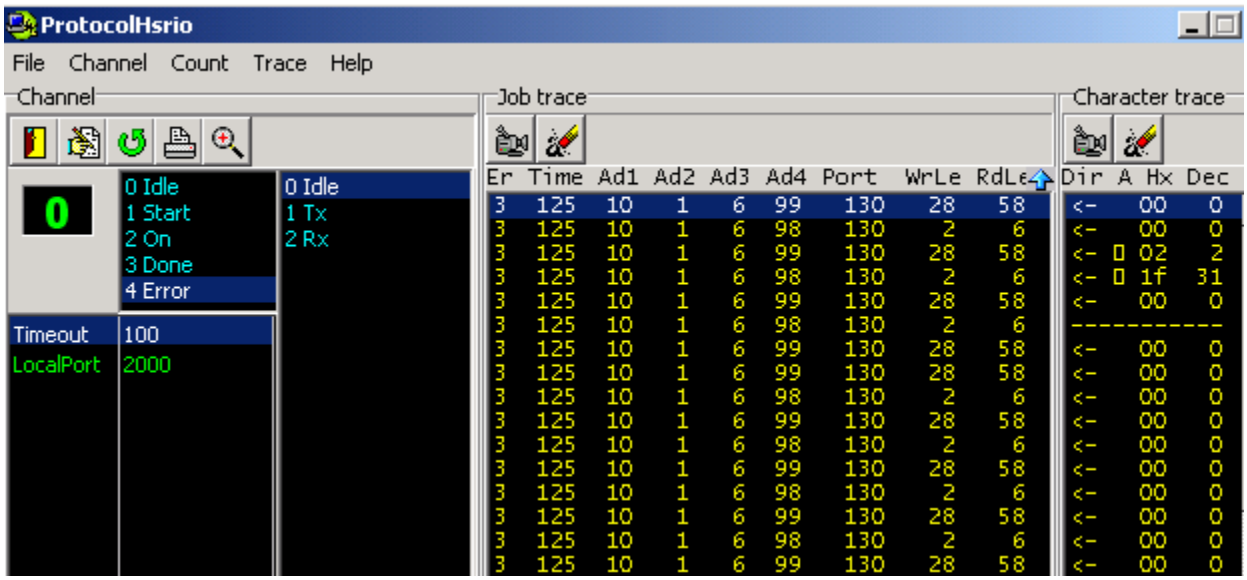
4.1 CONFIGURATION AND TEXTS (OPTIONAL)



Configuration tool and text modules:

- CPU and modules editing
- Display status and communication errors
- Configuration variables settings
- Outputs forcing and inputs diplays
- Needs Windows® 2000 or next

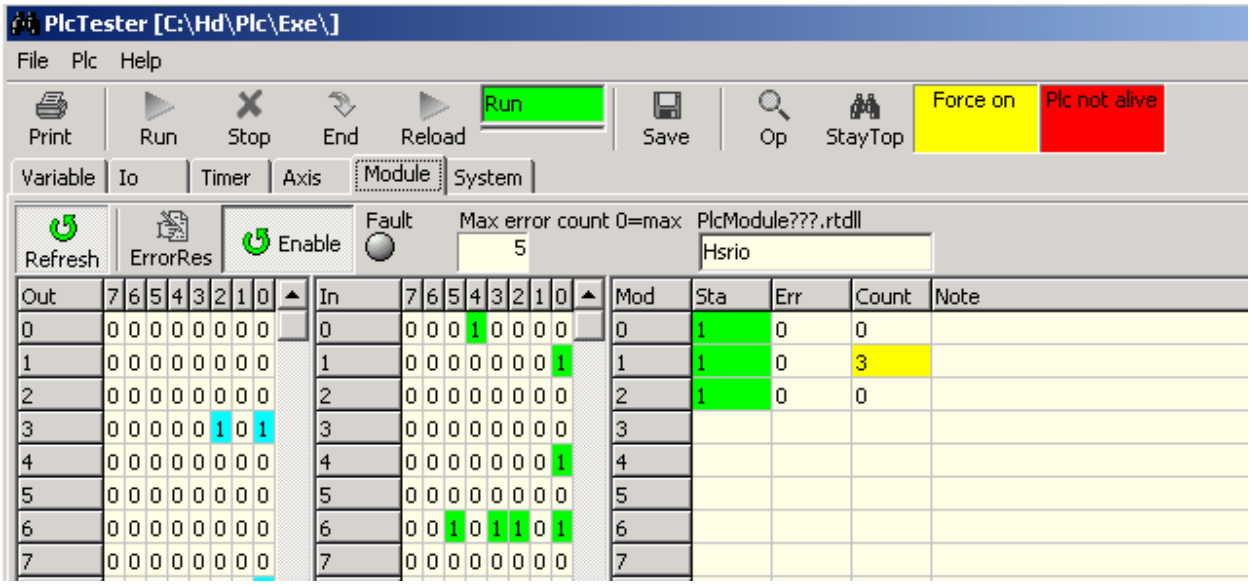
4.2 WINDOWS DRIVER



Configurable communication driver:

- Windows executable commuication
- shared memory interface
- continous or "on demand" jobs
- output forcing, input display and errors analyzing tools
- Needs Windows® 2000 or next

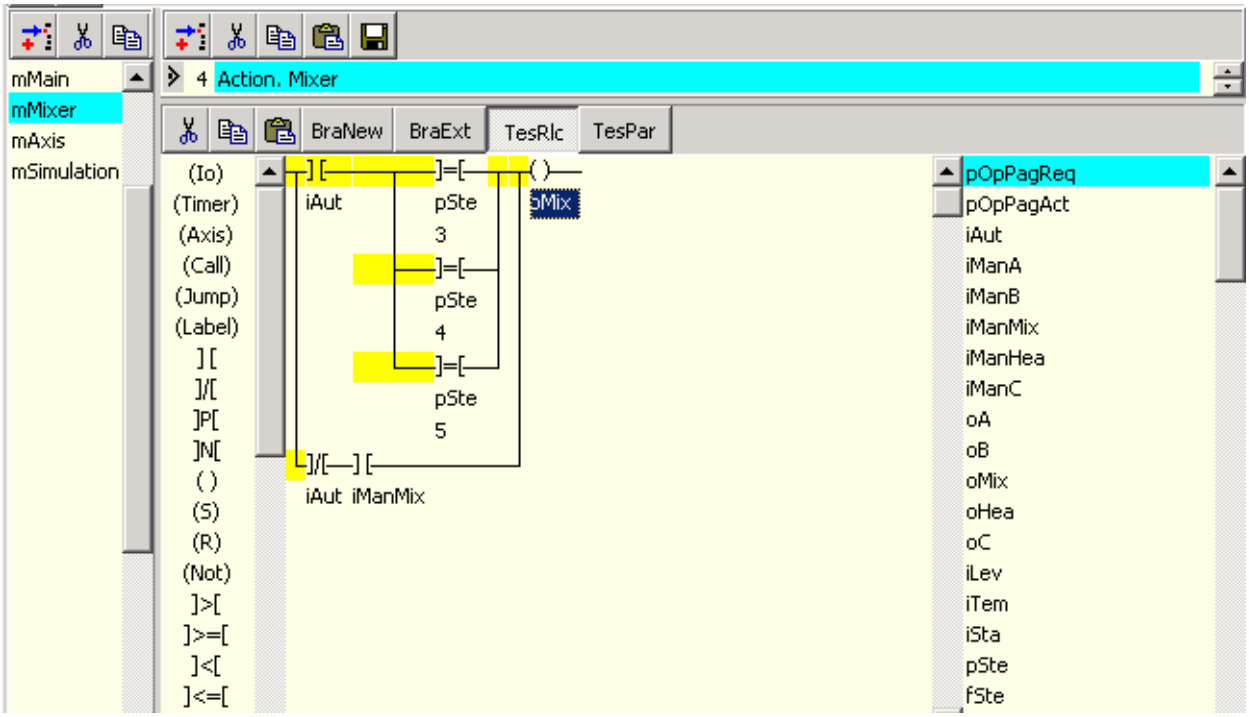
4.3 RTX DRIVER



Configurable real time configuration driver (0,1 ms):

- Communication RTX library (rtdll)
- Shared memory realtime interface
- forcing output, input display, and errors analyzing tools
- Needs RTX® 5.5 TCP-IP or next

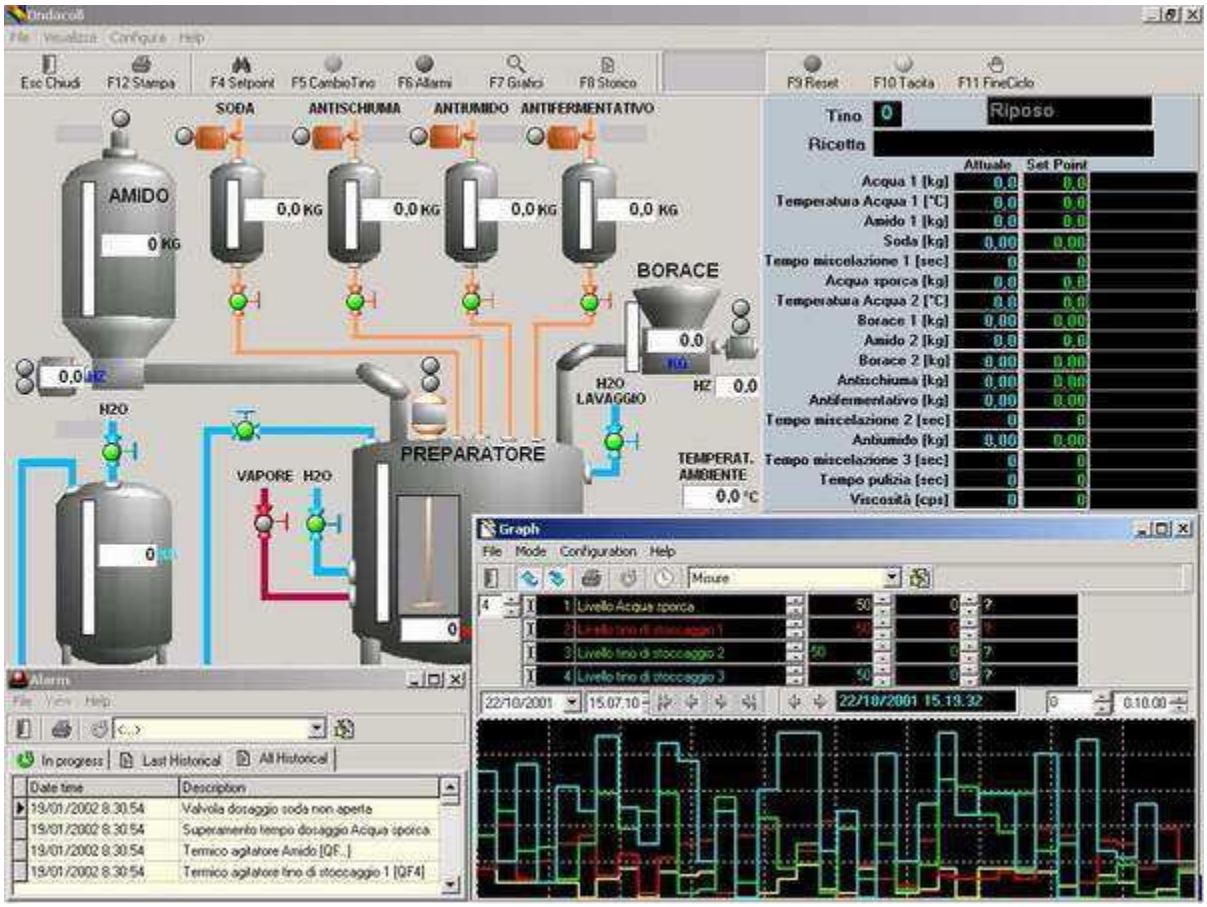
4.4 SOFTLOGIC HIPLC



Softlogic Package:

- 256 kBytes symbolic tags, persistent and VisualBasic, C++, Office,… accessible programs
- C++ compiled language (maximum performance and flexibility needs commercial compiler)
- ladder interpreted language
- motion control intergrated
- configuration and texts tools
- Windows version(10 ms typical scan) and RTX (0,1 ms typical scan)

4.5 SCADA HIPLC



SCADA Package:

- Configurables synoptics
- Variables log on database or file, based on time or event
- Visualization: alarms realtime and historical graphics
- Ethernet network multistation
- VisualBasic, C++, Office, .. programs easy intefacing

5 SERVICES

- HW sales
- SW licensing sales
- Training
- Developing "turnkey" applications
- Full customer assistance