

**INGENIERIA Y PROYECTOS ELECTRICOS,
S.A.**

JazzTM Micro-OPLCTM

Operator Panel and Programmable Logic Controller



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Break the rules. Replace that "smart relay" with a real Programmable Logic Controller that includes a full-function Operator Panel with numeric keypad—for the same low price.



PLC notes:

- Onboard I/Os: Digital and Temperature inputs, Relay or Transistor and Analog outputs
- High-speed inputs
- Windows-based Ladder Logic software
- Ladder code memory: 24K (virtual)
- SMS-enabled via GSM
- Remote access utilities
- Time-based control in 3 clicks
- Auto-tune PID, up to 4 loops

HMI notes:

- Two 16-character text lines
- Up to 60 user-designed screens
- Multilingual - the Jazz™ LCD display supports over 15 languages and 20 graphic icons
- Displays conditional messages
- Shows time, date, bit status, timer & integer values (up to 64 HMI variables per application)
- LCD illuminated screen

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Tel. 2443-0806/16

Applications

Jazz™. It's all around you



- **Industrial Automation**
Textile, robotics, packaging,
production lines



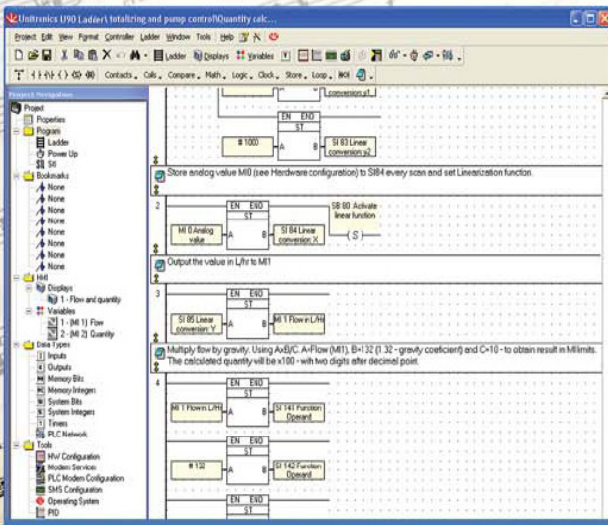
- **Water & Agriculture**
Pumping, irrigation,
flow monitoring



- **Building Automation**
Air conditioning, lighting,
barrier/door control,
alarm systems

Programming Software

Compose your PLC and HMI applications in one environment



Use the Ladder editor to:

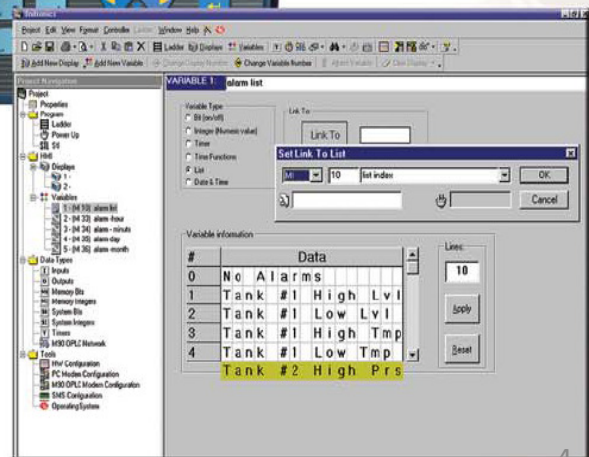
- Program your application
- Drag-and-drop contacts, coils, timers and function blocks (math, logic, clock)
- Test and debug programs



Use the HMI editor to:

- Design your operator interface
- Compose operator instructions
- Assign functions to keys
- Create and display variables

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Communication

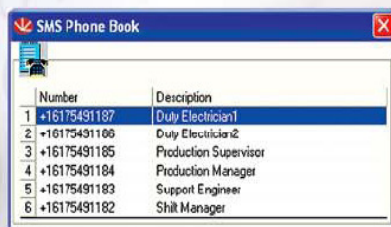
Jazz™ SMS Control

Music knows no boundaries

Use your GSM cell phone to implement real-time remote control in your application

The GSM-enabled Jazz™:

Sends and receives SMS messages containing both fixed text & variable data

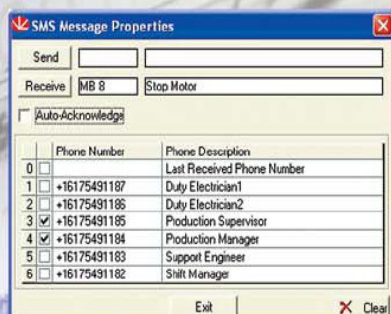


Sends messages to many cell phone numbers



Can route different messages to different phone numbers

Auto-acknowledges received messages



Protects your system: prevents unauthorized calls

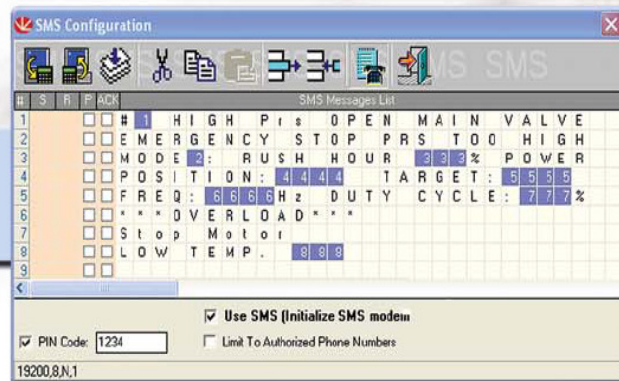
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Answers data requests from your cell phone



Sends data to any local or remote serial printer, via GSM

Contains up to 1K of user defined messages



Remote GSM control requires:

- A Jazz™ OPLC™ unit
- RS232/Programming Add-on port and cable
- A GSM kit (includes a modem, magnetic antenna, cables and adapters)



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Communication Remote Access

Jazz™ reaches across time and space



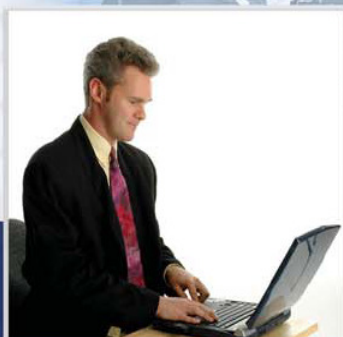
Access remote Jazz™ controllers via GSM or landline modem.



- Download, upload, or debug remote Jazz™ programs
- Operate the controller's panel via remote PC
- View real-time parameters
- View and operate several controllers on your PC screen, simultaneously, in real-time
- Read, write, and store online operand values
- Run, reset, or initialize a remote controller



Remote Access can run independently of the Ladder software, thereby protecting your program from unauthorized users



Communication

Serial Communication

Let's talk... Jazz™

RS232

Plug an Add-on port Module (optional) into the Jazz™ OPLC™ to enable PC access and to communicate with external serial devices, such as modems and printers.

MODBUS

Establish master-slave communications between Jazz™ controllers and any PC application that supports the MODBUS protocol (such as SCADA systems).



OPC/DDE Server

Enable the OPLC™ to exchange data with external applications. Our OPC/DDE servers can interface with SCADA systems, and read/write PLC data from/to Excel, Access, or other Windows-based applications.

DataXport

A powerful software utility that captures PLC application data and exports it to Excel files for logging or processing. Exports data according to a user-defined schedule or manually, via direct connection or GSM/landline modem.

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Technical Specifications

Article number	JZ10-11-R10	JZ10-11-T10	JZ10-11-R16	JZ10-11-T17	JZ10-11-R31	JZ10-11-T40	JZ10-11-UN20	JZ10-11-UA24	JZ10-11-PT15
	6 Digital Inputs 4 Relay Outputs	6 Digital Inputs 4 Transistor Outputs	6 Digital Inputs 2 Digital/ Analog Inputs 2 Analog Inputs 6 Relay Outputs	6 Digital Inputs 2 Digital/ Analog Inputs 2 Analog Inputs 7 Transistor Outputs	16 Digital Inputs 2 Digital/ Analog Inputs 2 Analog Inputs 11 Relay Outputs	16 Digital Inputs 2 Digital/ Analog Inputs 2 Analog Inputs 20 Transistor Outputs	9 Digital Inputs 2 Analog/ Digital Inputs 1 Analog input 1 PT100/TC Input 5 Relay Outputs 2 Transistor Outputs	9 Digital Inputs 2 Analog/Digital Inputs 2 Analog Inputs 2 PT100/TC Inputs 5 Relay Outputs 2 Transistor Outputs 2 Analog Outputs	3 Digital Inputs 3 Digital/ Analog Inputs 3 PT1000/ NI1000 Inputs 5 Relay outputs 1 Transistor Output
I/Os									
Digital inputs	6 pnp/npn (source/sink) 24VDC	6 pnp/npn (source/sink) 24VDC	8 ¹ pnp/npn (source/sink) 24VDC	8 ¹ pnp/npn (source/sink) 24VDC	18 ¹ pnp/npn (source/sink) 24VDC	18 ¹ pnp/npn (source/sink) 4VDC	11 ¹ pnp/npn (source/sink) 24VDC	11 ¹ pnp/npn (source/sink) 24VDC	6 ¹ pnp/npn (source/sink) 24VDC
High-speed counters	2 inputs can function as either high-speed counters (5 kHz, 16 bit resolution), or as normal digital inputs								
Analog inputs	None	None	Two ¹ 10 bit inputs: 0-10V and Two 10 bit inputs: 0-20mA, 4-20mA	Two ¹ 10 bit inputs: 0-10V and Two 10 bit inputs: 0-20mA, 4-20mA	Two 10 bit inputs: 0-10V and Two 10 bit inputs: 0-20mA, 4-20mA	Two 10 bit inputs: 0-10V and Two 10 bit inputs: 0-20mA, 4-20mA	Two 10 bit inputs: 0-10V and One 10 bit input: 0-20mA, 4-20mA	Two 10 bit inputs: 0-10V and Two 10 bit inputs: 0-20mA, 4-20mA	Three 10 bit inputs: 0-10V
Temperature measurement							1 PT100 or Thermocouple input	2 PT100 or Thermocouple inputs	3 PT1000/ NI1000 inputs
Digital outputs	4 relay outputs	4 pnp (source)	6 Relay outputs	7 pnp (source)	11 Relay outputs	20 pnp (source)	5 Relay outputs 2 pnp/npn (source/sink)	5 Relay outputs 2 pnp/npn (source/sink)	5 Relay outputs 1 pnp/npn (source/sink)
Analog outputs								Two 12 bit inputs: +/-10V, 4-20mA	
Program									
Ladder code memory	24K (virtual)								
Bit/Coils	256								
Integers/Registers (16 Bit)	256								
Timers	64								
Operator panel									
Display size & Type	2 lines x 16 characters, STN LCD, LED backlight								
HMI displays	60 user-designed displays available								
Variables	64 HMI variables are available to conditionally display text and data. List variables add up to 1.5K's worth of HMI capacity								
Keypad	16 sealed membrane keys, including 15 programmable keys (10 of which are user-labeled)								
Communication	Via an Add-on port Module (JZ-PRG or JZ-RS4)²								
Serial communications	RS232/RS485, RS232/Programming Add-on port (optional, see Accessories)								
GSM support	SMS messages to/from many cell phone numbers, up to 1K of user-designed messages. Remote access-enabled								
MODBUS	Supports MODBUS protocol, Master-Slave								
General									
Power supply	24 VDC								
Clock (RTC)	Real-time clock functions (date and time)								
Battery back-up	10 years typical at 25°C, battery back-up for RTC and system data, including variable data								
Environment	NEMA4X/IP65 (from panel, when mounted)								

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