

ciSeries

CITRONIX
INK JET
PRINTING
SYSTEMS



SMALL AND LARGE CHARACTER NON-CONTACT PRINTING

ciSeries PRODUCTS

Citronix continuous ink jet printing systems provide high speed, reliable, non-contact printing for applying identifying marks, sell-by dates, and lot / date codes to almost any kind of material or surface including metal, glass, plastic, paper, wood and more.

The ciSeries systems are offered in a variety of configurations with several optional components to meet individual application demands.



printing

CAPABILITIES

Citronix printing systems are used in a wide range of industries including Food, Beverage, Paper, Household, Confectionary, Bakery, Pharmaceutical, Automotive, Lumber and Postal. The systems can print one to five lines of high quality text, graphics and bar codes. Print heights range from .06" (1.5mm) to .50" (12mm) providing the ability to print both small characters and large, bold characters. Fast-drying inks with strong adhesion properties provide excellent print quality at speeds in excess of 1000 feet / minute (304 meters / minute).

Inks are available for a variety of substrates or environmental conditions. Immediate dry or environmentally friendly quick dry inks suit any application requirement. Inks are offered in a range of colors, including high contrast yellow pigment for marking dark-colored surfaces. Unique pigment formulation and ciSeries ink circulation system provide uniform colorant dispersion without stirring mechanisms.

interface

INTUITIVE USER

True WYSIWYG message editing with drag and drop field based structure provide the user the most convenient and versatile message formatting available. A large quarter VGA graphical display with icon-based operation and full-size QWERTY style keyboard assure effortless operation. Store over 1000 messages for simple recall during product changeovers—remotely, locally or automatically.

Fast, single start and stop buttons provide the user an efficient startup and shutdown routine. Automatic self-diagnostics provide the user with informative displays to indicate status of the system and any corrective actions required. Service reminders prompt the user with preventive maintenance tasks and on-line help screens provide the user informative assistance without having to refer to a manual.

Designed for a global market, the ciSeries systems feature multiple language formats. Print multi-national characters, custom graphics at the touch of a button.



design

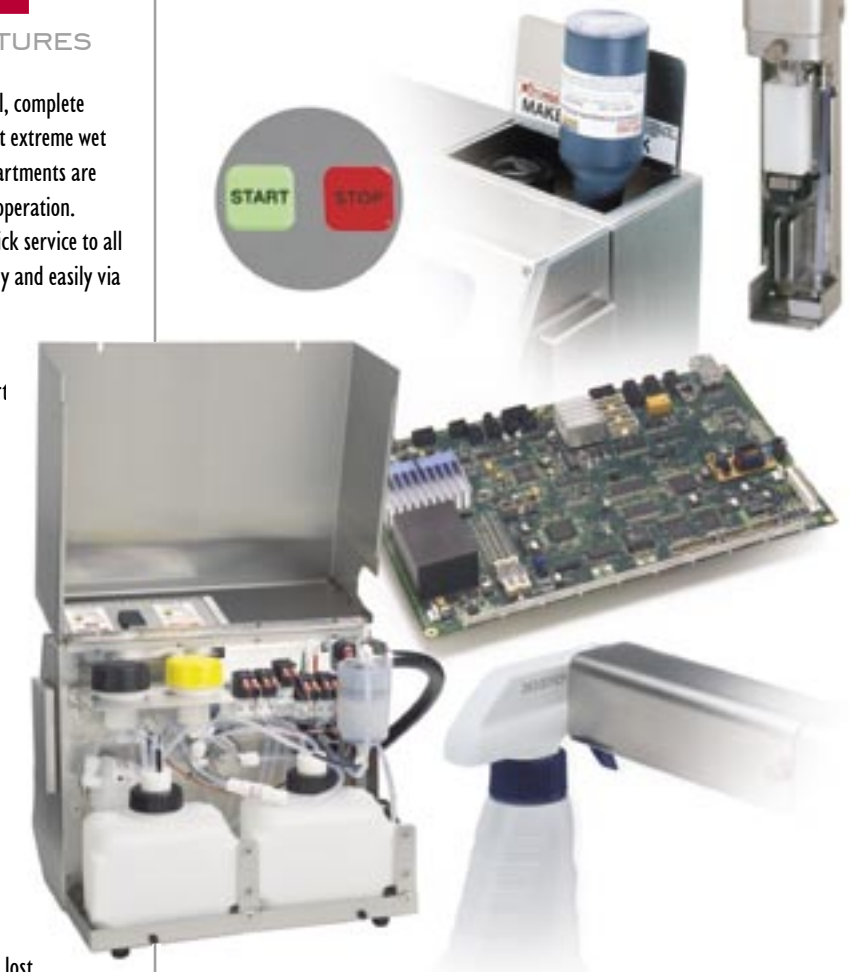
FEATURES

Rugged NEMA 4 (IP65) or NEMA 12 (IP53) industrial, complete stainless steel enclosures allow operation in the most extreme wet or dry applications. The electronic and fluidic compartments are completely isolated and vented to assure the safest operation. Enclosures are designed to allow easy access and quick service to all field repairable components. Fluids are added cleanly and easily via a foil sealed bottle.

State-of-the-art single board surface mount electronics technology coupled with integrated smart printhead and ink system components monitor critical operating functions. Operating settings are automatically adjusted dependent on the environment to maintain optimum print quality.

A single electronic pump, thick walled Teflon tubing with a revolutionary venturi design minimize evaporation points and optimize the ink return vacuum resulting in lower consumption rates. Minimized fluid evaporation potential provides affordable operation and a safer working area.

ciSeries continuous ink jet technology allows the printhead to mount in any orientation or environment. A heating mechanism allows operation in cold areas. An integrated printhead valve controls ink and solvent at the printhead providing clean starts and stops even when power is lost.



connectivity

FLEXIBLE

Integrated hardware as standard, Citronix systems have Ethernet, multiple RS232, RS485, USB, multiple programmable inputs, and multiple programmable outputs including a solid-state relay output providing unparalleled communications flexibility. The systems can accomplish multiple communication tasks at the same time. Information can be delivered to/from the systems simultaneously, allowing communication to remote systems, remote interfaces as well as database connectivity. Scanners can be used for scan and shoot operation allowing messages to be recalled locally or remotely. Inputs provide the ability for remote message selection and outputs provide methods to communicate warning or system fault conditions.



The **ci500** prints up to two lines of text, graphics and bar codes in demanding industrial environments. A self-diagnosing, simplified fluidic system provides the user informative displays for adding fluids. RS232/RS485 offer flexible communication options.



The **ci700** prints up to two lines of text, graphics and bar codes in demanding industrial environments. Automated printhead cleaning at startup and shutdown with automatic ink viscosity control provide reliable operation. RS232/RS485 offer flexible communication options.



The **ci1000** features the ability to print five lines of text, graphics and bar codes in the most challenging industrial environments. Self-regulating ink viscosity control with automated printhead maintenance and cleaning at startup and shutdown provide uninterrupted operation. Ethernet and RS232/RS485 provide the most flexible communication options.

specifications

ci500, ci700 & ci1000

Controller

Hardware

Single Printhead Control
 Dual Processor: Motorola ColdFire / DSP
 Speed: 66Mhz
 Memory: 4 MByte Flash
 16 MByte RAM

Interface and Connections

ci500/ci700	ci1000
I RS232 or RS485	I Ethernet (10 / 100MB)
I RS232	I RS232 or RS485 (1200 up to 115.2KB)
I PS2	I RS232 (1200 up to 115.2KB)
	I PS2

Inputs (Opto Isolated, Open Collector or TTL Type)
 2 Photocell 1 Shaft Encoder 4 Programmable
 Remote Message Selection: 4 Inputs (16 Possible Selections)

Outputs

Two Alarms - Warning and Failure (Open Collector)
 Programmable Dry Contact Relay
 External Power (+12VDC 500mAmp)
 Printhead Umbilical (options available upon request)
 9 Feet (3 Meter) or 15 Feet (4.5 Meter)

User Interface

Full-Size QWERTY Keyboard	Graphic Creation and Printing
Quarter VGA Backlit Graphical Display	Graphics Downloadable
Intuitive Icon Based Operation	Integrated Graphic Editor
WYSIWYG Message Editing	Automatic Diagnostics
Drag/Drop Field Based Formatting	Error and Activity Logs
Dynamic Message Storage (over 1000 Messages)	Service Reminders
Single Button Start and Stop Operation	Continuous Print Capability
Password Security	Backup / Restore Functions
Real and Expiration Time and Date	Multiple Operator Languages
Shift and Rollover Functions	Multi-National Character Printing
Product and Batch Counting	Downloadable Software Updates

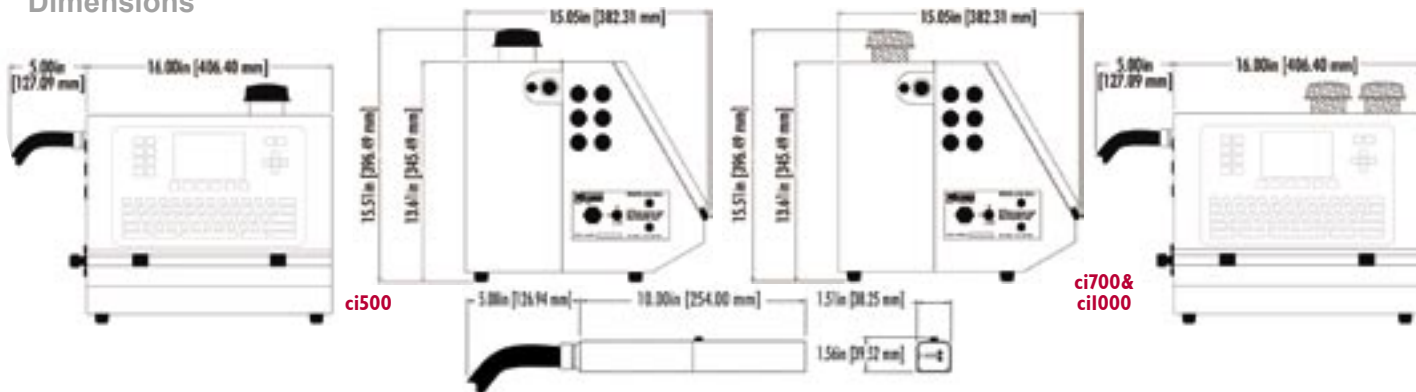
Operating Environment

Temperature: 35° - 113°F (5°C - 45°C)
 % Relative Humidity: 10 - 90% (non condensing)

Electrical Requirements

Auto Ranging: 90 - 260 VAC, (3 Amp)
 Frequency: 50 - 60Hz

Dimensions



Printhead

Technology:	Continuous Ink Jet (CIJ)
Image Height:	.06" (1.5mm) - .50" (12mm)
Vertical Resolution:	up to 50 DPI
Horizontal Resolution:	5 - 100 DPI
Print:	Text, Graphics, Bar codes
Lines of Print:	ci500/ci700: 2 lines ci1000: 5 lines
Line Speed:	1000 ft/minute (304 M/minute)
Throw Distance:	1" (25mm)
Printhead Orientation:	Omni Directional

ci700 and ci1000 Features Automatic Maintenance and Cleaning at Startup and Shutdown.

Consumable and Delivery

Ink Types:	Full Range
Ink Colors:	Black, Red, Blue, Yellow
Ink Dry Time:	Immediate
Ink Bottles:	16 oz (473ml)
Makeup Bottles:	ci500: 4oz (118ml), ci700/ci1000: 16 oz (473ml)
Fluid Capacities:	64 oz (1.9L)

Physical Characteristics

	ci500	ci700	ci1000
Enclosure:	Stainless Steel	Stainless Steel	Stainless Steel
Environmental:	Nema 12 (IP53)	Nema 12 (IP53)	Nema 4 (IP65)
Weight Controller:	40 lbs (18kg)	43 lbs (19kg)	43 lbs (19kg)
Weight Printhead:	2 lbs (.90kg)	2 lbs (.90kg)	2 lbs (.90kg)

Optional Accessories

Alarm Beacons	Photocells	Printhead Wash Station
Bench Mountings	Shaft Encoders	
Floor Mountings	Positive Air Kit (dusty environments)	

By request, Citronix can adapt hardware and software to meet specific application demands.



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