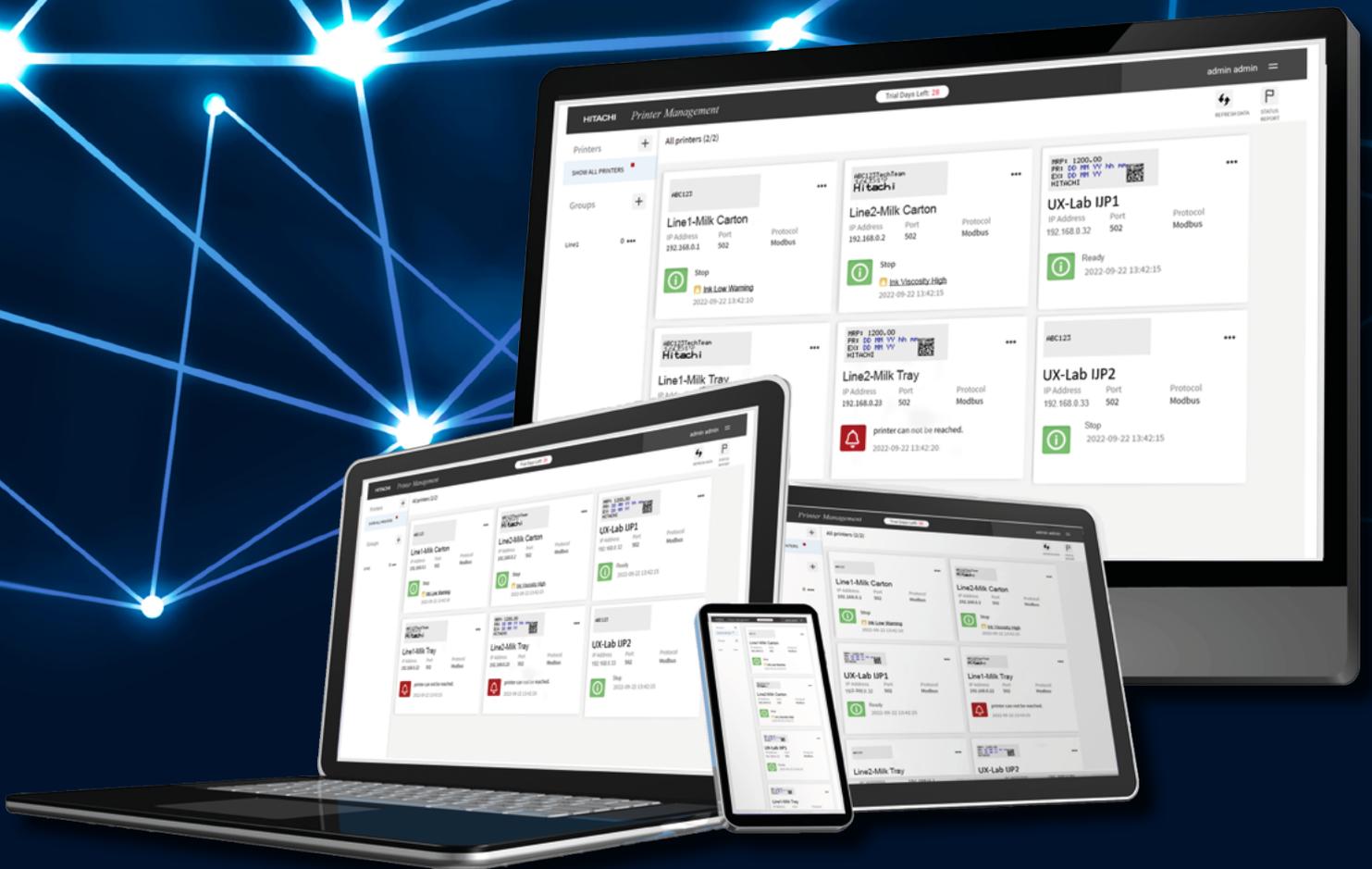NEW

HITACHI
Inspire the Next

Marking & Coding Solutions
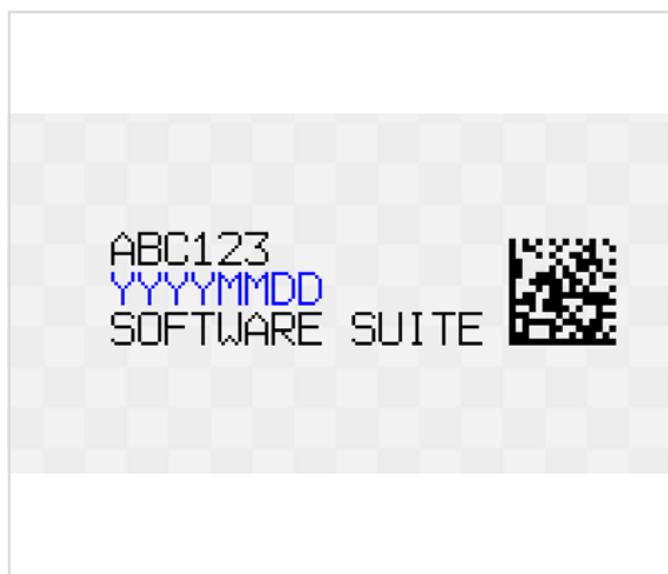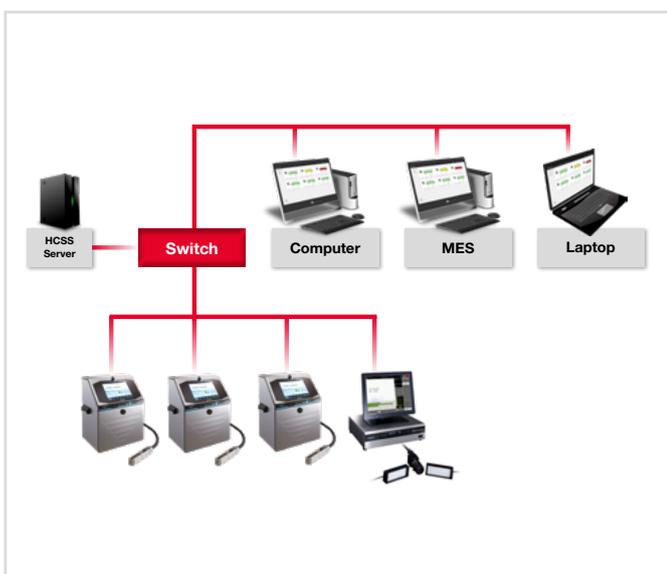# Software Suite

Coding Software Suite

As the core of Hitachi's Marking & Coding Solutions, the Hitachi Coding Software Suite (HCSS) has a client/server architecture with flexible web browser based user interface for operators to design labels, control, manage and monitor marking and coding equipment such as printers and vision systems. This solution also provides access to the printer dashboards to configure and manage automated printing applications dynamically.

Client Server Web Based

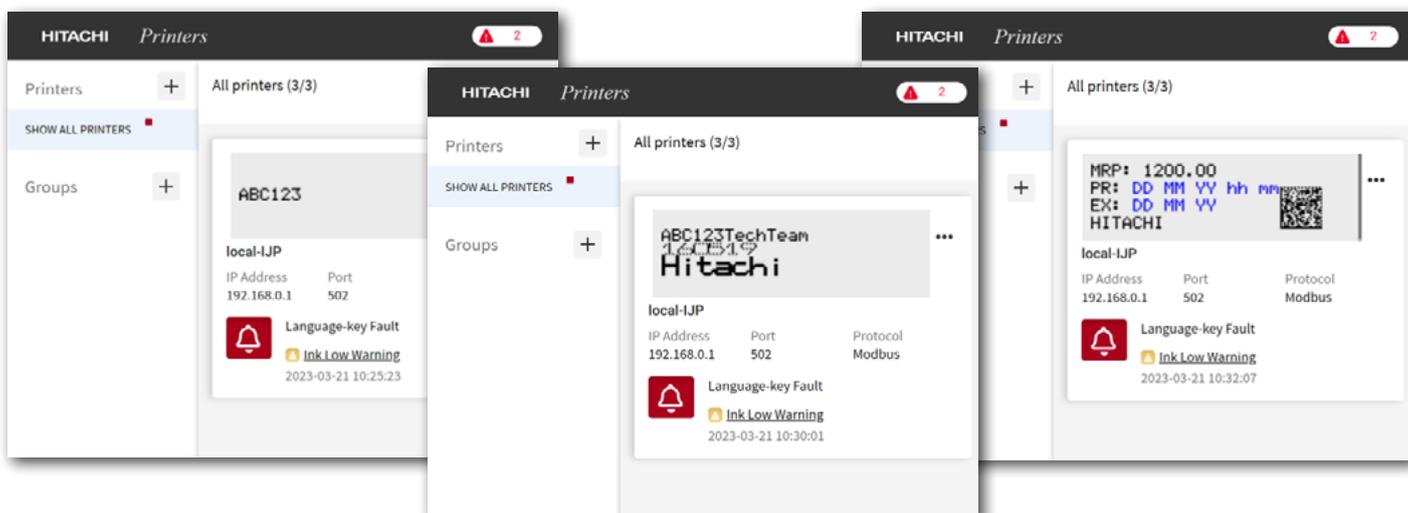Install once, access anywhere via web browser on PC, tablet or smartphone.

Message Designer

Powerful WYSIWYG (what you see is what you get) message designer for Hitachi Continuous Inkjet Printers.
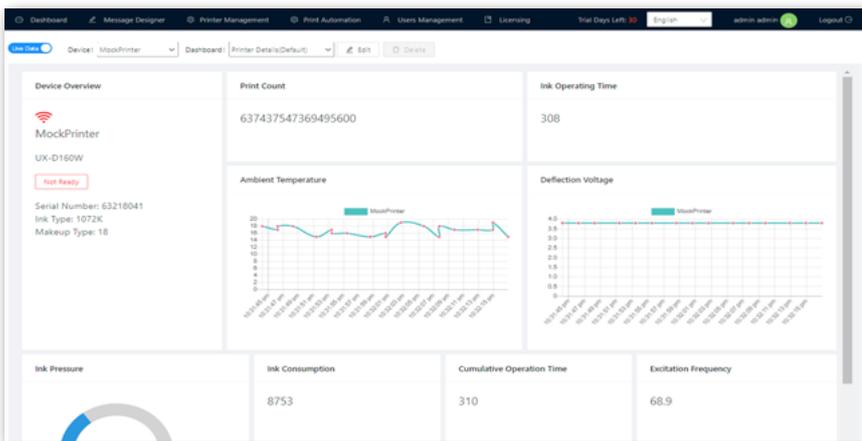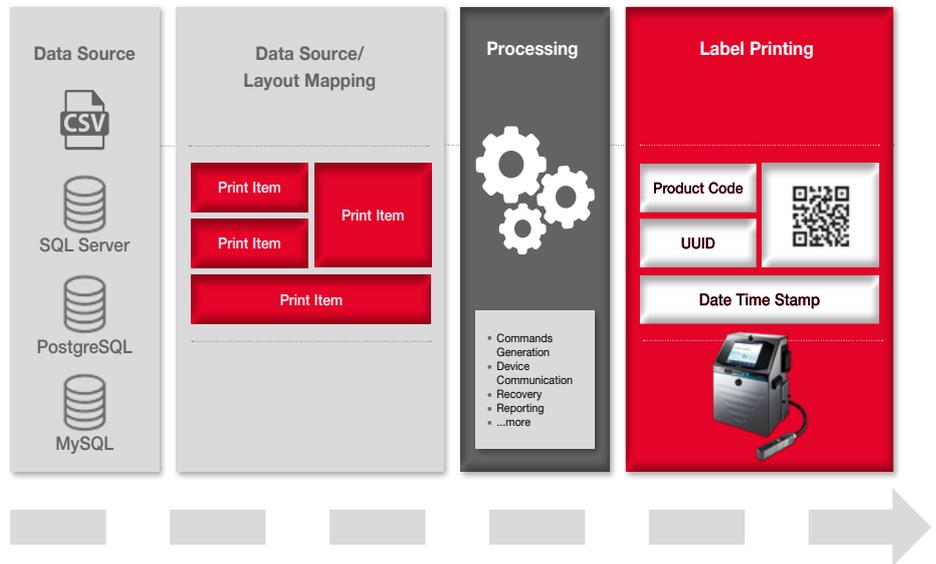
Device Management

Individual printers, printer groups and/or vision system (MC20S) can be targeted and managed. The status of these networked devices can be viewed in one aggregated view or individually in detail. Message preview and basic device remote operations are available for inkjet printers (IJP). Basic MC20S Vision Systems offers remote operations.

End to End Coding Automation

Printing Automation

Powerful and configurable platform to fetch data from local or remote customer data source and dynamically populate labels to meet various application requirements.

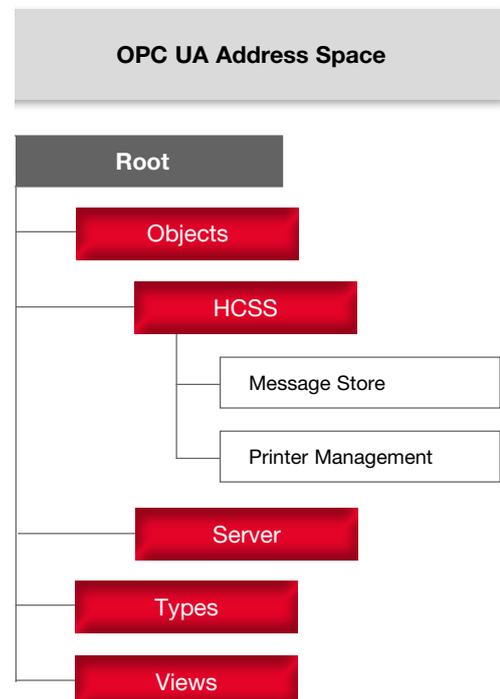| Data Source	Data Source/ Layout Mapping	Processing	Label Printing
CSV	Print Item		Product Code
SQL Server	Print Item		UUID
PostgreSQL	Print Item		Date Time Stamp
MySQL	Print Item	Commands Generation, Device Communication, Recovery, Reporting, ...more	

Dashboard

All critical printer status and data can be viewed from predefined or customized dashboards to remotely monitor and manage printers on production lines.

OPC-UA Connect

Flexible OPC-UA server application, provides powerful business logics and bridge to connect customers' MES and ERP system to network printers.

OPC UA™

OPC UA Address Space

- Root
  - Objects
    - HCSS
      - Message Store
      - Printer Management
  - Server
  - Types
  - Views

End to End Coding Automation

Message Designer

User-friendly HMI allows users to manage:
- **Message style**
    - Individual
    - Free layout

- **Print format**
    - Set number of lines
    - Add/remove columns
    - Bold, dot matrix, inter-character and
      line spacing

- **Print specification**

    - Character height
    - Ink drop use
    - Character width and orientation
    - Print start delay
    - Product speed matching
    - Speed and fine control compensation
    - Encoder pulse rate division factor
    - Line speed
    - Print distance (head to target)
    - Print target width
    - Actual print width
    - Repeat count and intervals
    - Target sensor timer and filter
    - Ink drop charge rule

- **Calendar and count condition**

Create the message with diverse contents, e.g:
- Alphanumeric
- Calendar
- Counter
- Time counter
- Logo (*bmp) elements
- GS1 compliant 1D and 2D codes
  (See HCSS user-manual for supported codes)

Powerful message management, persistence
and control can transfer the created message
between the file system/database and the
printer or printer groups.
WYSIWYG message preview and listing.

Device Management

- **Printer registration management**
    - add/remove printers or printer groups
- **Printer grouping management**
    - create and edit printer group
- Send and print message to group printers
  simultaneously
- Printer message previewing
- Remote operation (start, shutdown, ready,
  standby, fault clear, online/offline)
- Vision system registration and status monitoring
- Basic vision system remote operation
- Marking check job management

**Monitor with real time status of printers
or printer groups:**
- Ink operating time
- Ink (remaining) level*
- Makeup (remaining) level**
- Ink pressure
- Ink/Makeup replacement warning
- Print count
- Maintenance and environment information
- Dynamic printer alarm management

Individual and grouped printers overview on a
single screen. Preview of data source & message
layout.
 * available from UX-D Series only
** UX-B and UX-D860W are not supported

Printing Automation

- CSV, text or databases data source
  (SQL server, PostgreSQL, MySQL) connections
- IJP Protocols support for Modbus (TCP) or
  RS-232C (tunneling)
- Data preview
- User-friendly mapping between label
  items and data source fields
- Dynamic print automation jobs
- Preview of data source and message layout
- Target individual or group printer(s) settings
- Automatic print speed
- Repeat printing function
- Multiple print job creation
- Print job status monitoring and reporting

OPC-UA Connect

- Connect with HCSS using OPC-UA protocol
- List IJPs
- Read IJP parameters
- Operations that can be performed e.g:

    - Set/Reset print count
    - Get alarm count
    - Get alarm history
    - List messages
    - Send message to printer
    - Send message to group
    - Update message
    - Read current message
    - Built-in customer business logics

Dashboard

Display detailed status overview of all connected printers using a collection of different widget types

- Various dashboards to display available printer status data and remaining operation time for parts which require regular maintenance and replacement
- Dashboards can be customized by resizing, replacing, and repositioning widgets
- Switch between live and historical mode
- Selection date-range (date/time) for filtering data
- Reported parameters include:

    - Ink/Make-up levels (UX Series only) ink viscosity, ink pressure, ink use time
    - Ink/Make-up consumption
    - Print count, cumulative operating time, ambient temperature
    - Deflection voltage, excitation V-Ref, excitation frequency
    - Filters, valves, pump remaining usage time
    - Operation, warning status
    - Printer type, serial number
    - Basic OEE

Technical Specification

System requirements:
- Installation requires admin rights
- 8 GB RAM or higher
- Windows 10 64-bit OS
- 30 GB disk space (for large number of messages, additional disk space might needed)
- Installer manages all other prerequisites
- Recommend browser: Chrome

Display languages:
English, Japanese, Simplified and Traditional Chinese, Spanish, French, German, Portuguese, Vietnamese, Arabic, Korean

Printer support:
RX-SD/RX2-SD (Modbus/TCP)
UX Series*
* UX-B and UX-D860W are not supported

HCSS usability may be limited based on the used devices and screen sizes.

User Management

- Authorization administration
- User registration and password
- Role creation and definition
- Function and feature permissions

30 days trial
URL: https://hitachicoding.com/en/software-suite/download-page

Hitachi Software Suite Help Center
URL: https://hitachicoding.com/en/software-suite

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