# Linx CSL60

## Laser Coding System

### Coding and marking faster in challenging applications

The Linx CSL60 laser coding system is designed for high-speed coding applications in demanding production environments.

Based on $CO_2$ laser coding technology, the Linx CSL60 has a high powered 60 W laser tube and is ideal for beverage, food, personal care, automotive, extrusion and carton packing applications. For customers who need to improve their coding and marking process, the CSL60 includes a number of unique features that ensure high quality product coding across the widest range of materials and line speeds.

### Improved brand protection

- High resolution, permanent coding, even on hard to mark materials such as glass and rubber
- Crisp, clear coding on glass with VisiCode®, even at high line speeds
- Largest marking field in the market – up to a code height of 601 mm. For large area coding applications such as food/yoghurt
- Clear coding on high speed PET lines – with the 9.3 µm laser tube option
- Powerful processor allows coding at fast line speeds with no compromise on code quality. Codes up to 2100 characters per second*.

### Quality coding solution

- Delivers exceptional reliability and consistency of code, ease of use and efficient operation
- Widest combinations of lens, marking heads and tube options – enables the Linx CSL60 to be configured to meet your application, which means efficient use of power and extends the life of the equipment
- Easy to integrate into bottling machinery – supply unit can be located up to 10m away
- No consumables – clean, and cost effective
- Air cooled – no ancillary air cooling or factory air required (for IP54 variant).

### Increased productivity

- Full system IP65 rating – for reliable coding in washdown environments. Less downtime as the Linx CSL60 can be left in situ in your production equipment
- The detachable laser head with quick disconnect cables makes integration into production environments easier – even in tight spaces – and reduces servicing time
- LinxVision® enabled touch screen – for quick code creation and selection, fewer coding errors, and less downtime between product runs
- High power 60 W laser tube – for coding onto hard to mark materials and on high speed lines. Code up to 70,000* bottles per hour and meet your production deadlines.

# Linx CSL60 Scribing Laser Coding System

**CSL60 LASER MARKING UNIT**

185 mm
750 mm
145 mm

**SUPPLY UNIT**

400 mm
147 mm
335 mm

**LINXVISION TOUCH SCREEN INTERFACE**

215 mm
46 mm
300 mm

## Technical Specifications

### LASER DETAILS

Laser type: Sealed RF excited $CO_2$

Max. laser output (10.6 µm): 60 W

Laser wave length: 9.3 µm or 10.2 µm or 10.6 µm

Laser tube warranty: 2 years

### PERFORMANCE

Line speed*: Up to 900 m/min

Marking Speed*: Up to 2100 characters/sec

No. lines of text: Only limited by character size and marking field size

Code height: Up to marking field size – max height of 601 mm

Print rotation: 0-360°

### MARKING HEAD & LENS OPTIONS

Marking head options: SHC60c, SHC100c, SHC120c, SHC150c

Lens (mm): 64, 95, 100, 127, 150, 190, 200, 254, 300, 351, 400, 500, 600

Spot size: From 0.091 mm to 1.65 mm

Marking field size: Up to 440 mm x 601 mm

Mark distance: From 67 mm to 576 mm

### PHYSICAL CHARACTERISTICS

Material: Stainless steel covers, anodized aluminium chassis

Weight: Laser head (IP54) – 26.5 kg; (IP65) – 27 kg, Supply unit – 13 kg

Conduit length: 3 m (standard), 5 m (option), 10 m (option)

Marking head mounting options: Down (90°), or straight shooter (0°), variable length Beam Extension Units (BEU), 90° Beam Turning Unit (BTU)

Marking head rotation: 0-360° with BEU and BTU

Protection class: IP54 (standard), IP65 (option)

Cooling: IP54 - air cooled, IP65 - Blower Unit (option)

Supply voltage/frequency: Auto selection range 100 V to 240 V, 50 Hz / 60 Hz

Maximum power consumption: 1.15 kW

### LINXVISION TOUCH SCREEN USER INTERFACE

Easy access operator toolbar: Date & time offset, variable text, rotate / move / scale code, adjust laser intensity

Multiple operating languages: Arabic, Brazilian Portuguese, Bulgarian, Chinese Simplified, Chinese Traditional, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Slovak, Spanish, Swedish, Thai, Turkish, Vietnamese

Password protection: Multiple protection levels and access rights (User defined)

### CODING AND PROGRAMMING FACILITIES

Code options: Date, time, static text, variable text, serial numbers, shift codes, increment/decrement (batch count), 1D/2D barcodes, graphics and logos, Julian date, Custom date and time formats, 2D codes including DotCode

Character type: Vector fonts

Standard system vector fonts: OTF, TTF, PFA, PFB and SVG fonts

Optional customized fonts: Arabic, Bengali, Chinese, Japanese, Russian, Thai, Vietnamese

Bar codes: BC25, BC25I, BC39, BC39E, BC93, GSI-128, PZN, EAN 8, EAN 13, BC128, EAN 128, POSTNET, SCC14, UPC_A, UPC_E, RSS14TR, RSS14ST, RSS14STO, RSSLIM, RSSLIMGP, RSSEXP

Data matrix 2D codes: ECC000, ECC050, ECC080, ECC100, ECC140, ECC200, ECC PLAIN, QR, Aztec

### GENERAL FEATURES

Variable pulse frequency: 50 Hz to 160 kHz

Memory storage: (SD) 1 GB

Set-up: Via LinxVision UI or LinxDraw (PC)

LinxDraw compatibility: Windows 7

### ENVIRONMENTAL DETAILS

Ambient operating temperature: 5 to 40 °C (70 % intensity at maximum temperature)

Automatic overheat detection: Yes

Storage temperature: 5 – 65 °C

Humidity range: Maximum of 90 % (relative, non-condensing)

### INTERFACING

Interface ports: 1 detector, 1 encoder, Serial RS232, 1 External RJ45 Ethernet Port, 1 Internal RJ45 Ethernet Port (for LinxVision), Status Beacon, Fume Extraction

Computer interface: Ethernet

Input / Output options: Job select, Good / Bad Mark signal, Interlock, Start / Stop, Ready to Mark, System Ready, Trigger monitor, Trigger enable

### SAFETY FEATURES

Safety module, machine integrated: With a safety circuit according to EN 13849-1, achieving performance level "d" for the door circuit and performance level "e" for the emergency stop circuit

No safety module: Gives Shutter lock with no performance level; Interlock to performance level "d"

### REGULATORY APPROVALS

• CE   • NRTL/FCC   • EAC   • RoHS

\* Maximum line speed / marking speeds are application dependent

**INVISIBLE LASER RADIATION**
AVOID EYE OR SKIN EXPOSURE
TO DIRECT OR SCATTERED RADIATION

MAX. POWER: 150 W
WAVELENGTH: $\lambda$ = 9 - 11 µm
LASER CLASS 4
(EN 60825-1:2014)