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.
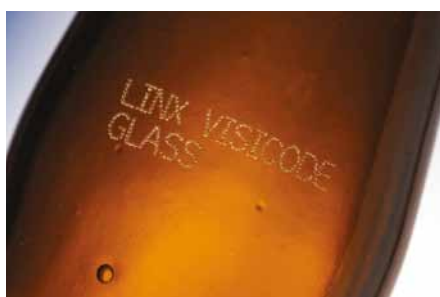
Improved brand protection

- 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: λ = 9 - 11 µm
LASER CLASS 4
(EN 60825-1:2014)