

# ICOM CSE-7000 imaging engine (2D,1D 스캔엔진)



2D 스캔엔진으로 , 1D 바코드 Reading 용이한 Beam 패턴

## 특징

**가장 작은 사이즈의 H/W decoding을 포함한 엔진 모듈**  
모든 1D , 2D 바코드를 인식 가능하며 H/W decoding board 를 기본 탑재하여 가장 편하게 가장 심플하게 가장 빠르게 바코드의 인식을 가능하게 합니다.

**Powerful 624 MHz processor, fast sensor shutter speed and patent pending fast-pulse illumination**  
Superior performance on 1D and 2D bar codes, improving productivity in a wide variety of applications

**Exceptional motion tolerance**  
Enables extraordinary scanning speed for all bar codes , increasing throughput and productivity — regardless of application

## Sets the bar for 1D and 2D scanning performance

Until today, businesses were required to choose between a high performance laser engine for 1D bar code scanning or a 2D imager that offered expanded functionality but reduced performance. The revolutionary Symbol SE4500 from Motorola eliminates this disparity, offering a comprehensive feature set that completely re-defines imaging technology. Stunning performance on 1D and 2D bar codes combines with the ability to capture still images and video, allowing businesses to deploy a world of new applications. The PL4507 decoder board, armed with a powerful 624 MHz microprocessor, decodes 1D and 2D bar codes in milliseconds. The patent pending fast-pulse illumination and fast sensor shutter speed enable image capture at a full 60 frames per second, delivering outstanding motion tolerance. The result is the extraordinary scanning speed required to boost productivity in many industries — from retail and healthcare to transportation and logistics and public safety.

## Easy to use

When your products are powered by the Symbol SE4500, users will enjoy an unparalleled ease of use. Full omnidirectional scanning eliminates the need to precisely align bar code and imager. A unique

aiming pattern with a bright central dot ensures quick, accurate scanning — even in bright sunlight. The result is a highly intuitive scanning function that increases worker productivity, virtually eliminating the need and cost associated with training.

## Easy integration into a wide variety of products

Designed for easy integration, the Symbol SE4500 reduces development time and cost, paving the way for highly cost-effective mobility solutions. Low power requirements help preserve ample battery power for a full shift. At less than three tenths of an ounce and approximately a quarter cubic inch, this small, lightweight device can be easily integrated into even the most space-constrained products, including mobile computers, handheld scanners, self-service kiosks, medical and diagnostic instruments, lottery terminals and more. Three models offer different focal distances to best meet unique product requirements. The SE4500SR (Standard Range) is designed for 1D intensive applications with medium to large bar codes; the SE4500DL is 'driver's license optimized' — ideal for small to medium bar codes and 2D intensive applications, including U.S. driver's license ID verification; and the SE4500HD (High Density) is tailored to enable the accurate capture of very small bar codes.

**Unique aiming pattern**

Bright central dot ensures quick, accurate scanning — even in bright sunlight

**Miniature, lightweight form factor**

Less than three tenths of an ounce, adds minimal weight and maximum data capture functionality; tiny size fits easily in the most space-constrained designs

**Low power consumption**

Ideal for battery powered and other mobile devices

**Two engine models to meet wide variety of working ranges and applications**

SR (Standard Range) designed for 1D intensive applications with medium to large bar codes; HD (High Density) for very small bar codes

**Compatible with SSI and SNAPI command interfaces**

Expands application flexibility with fast, simple communication and support for advanced features and functionality between imager and host

**Optional software developer kit (SDK)**

Provides familiar Microsoft Windows 2000 and XP platform support for rapid development of applications that integrate easily into the customer environment

**Proven technology you can count on**

When you choose the Symbol SE4500, you get the peace of mind that comes from choosing superior, well-tested technology. Every day, all around the world, our OEM products power millions of devices in thousands of applications across industries. You enjoy award-winning data capture technology, ease of integration, high reliability and superior performance, enabling the rapid yet cost-effective

**ICOM CSE-7000 Specifications**

Physical Characteristics	
Dimensions:	11.8 mm H x 21.5 mm W x 16.3 mm D
Weight:	0.29 oz./8.22 grams
Interface:	Camera Port on 21 pin ZIF connector
Performance Characteristics	
Sensor Resolution:	752 x 480 pixels
Field of View:	Horizontal: 40°, Vertical: 25° Skew Tolerance: ±60° Pitch Tolerance: ±60° Roll Tolerance: 360°
Focal Distance from Front of Engine:	SR: 8 in. DL: 5.3 in. HD: 2.9 in.
Aiming LED (VLD):	655 ±10 nm Laser
Illumination Element:	625 ±5 nm LEDs (2x)
Min. Print Contrast:	Minimum 25% absolute dark/light reflectance measured at 650 nm
User Environment	
Ambient Light:	Max 96,900 lux (direct sunlight)
Operating Temperature:	-22° F to 131° F/ -30° C to 55° C
Storage Temperature:	-24° F to 158° F/-40° C to 70° C
Humidity	Operating: 95% RH, non-condensing at 55° C Storage: 85% RH, non-condensing at 70° C
Shock Rating:	2000 G ±5%, any mounting surface, at -30 and 70° C for 0.85 ±0.05 ms 2500 G ±5%, any mounting surface, at 23° C for 0.85 ±0.05 ms
Power:	Operational Input Voltage: Engine: 3.3V ±10% Current Draw with Illumination and Aiming: 250 mA

design of high-quality solutions that not only meet the needs of your customers — but also improve your margins.

For more information on the Symbol SE4500, access our global contact directory at [www.motorola.com/enterprisemobility/contact](http://www.motorola.com/enterprisemobility/contact) us or visit [www.idsystems.co.kr](http://www.idsystems.co.kr)

**ICOM CSE-7000 Specifications**

Physical Characteristics		
Dimensions:	25.3 mm H x 38.0 mm W x 6.6 mm D	
Connector:	30-pin ZIF connector, 0.5mm pitch	
Host Types:	SSI, RS-232 (various modes), SNAPI, USB (various modes)	
Performance Characteristics		
Symbologies Supported:	<b>1D:</b> All major codes <b>2D:</b> PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode <b>Postal Codes:</b> US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal Dutch Postal (KIX)	
Image File Formats:	BMP, TIFF and JPEG	
Power:	Input Voltage: 3.3V ±10% Current draw (including engine): 300 mA average during scanning, 3.3V input	
Ranges		
SR Focus	Near	Far
5 mil Code 39	2.1 in./53 mm	7.5 in./191 mm
<b>100% UPC/EAN</b>	1.6 in./41 mm	15.5 in./394 mm
6.7 mil PDF417	3.4 in./86 mm	7.1 in./180 mm
HD Focus	Near	Far
3 mil Code 39	1.6 in./41 mm	3.8 in./97 mm
4 mil PDF417	1.8 in./46 mm	3.5 in./89 mm
Warranty		
Subject to the terms of ICOM's hardware warranty statement, the CSE6000 is warranted against defects in workmanship and materials for a period of 12 months from the date of shipment. For the complete ICOM hardware product warranty statement, go to: <a href="http://www.idsystems.co.kr">http://www.idsystems.co.kr</a>		

