

# GRYPHON™ 4500-HC 2D SERIES



## THE PURPOSE OF BAR CODE READERS IN THE HEALTHCARE INDUSTRY

The key mission of scanners in the healthcare industry is to improve the quality of patient care while reducing medication errors. Additionally, healthcare environments have requirements that scanners need to be regularly cleaned and disinfected. The Datalogic Gryphon™ HC product series is specifically developed for healthcare applications with Disinfectant-Ready enclosures treated with anti-microbial additives and are designed to withstand daily cleaning with harsh disinfectant solutions.

The Gryphon 4500-HC 2D readers can decode virtually any 1D and 2D bar code symbology and can read codes from LCD monitors, cell phones, smartphones and other mobile devices. High Density (HD) models are also available for reading smaller, condensed codes.

Ideally suited for stationary applications in administration, laboratory and hospital environments, the GD4500-HC 2D desktop model offers an affordable corded solution, while the GM4500-HC 2D or GBT4500-HC 2D cordless models (STAR or Bluetooth®) provide extended mobility for cordless operations.

Datalogic distinctive reading technology with highly visible white-illumination is easier on the human eyes and reads colored labels better. The highly visible 4-Dot aimer provides a clear indication of the reading area, making targeting codes quick and easy. Datalogic's patented 'Green Spot' technology provides additional visual good-read confirmation which is ideal for quiet environments like bedside patient care.

One of the most important technical innovations that the Gryphon 4500 wireless readers achieve is the wireless charging system for the battery, which enhances the reliability of the entire solution, while lowering the total cost of ownership (no need for contact cleaning or maintenance procedures).



### ALL PRODUCTS

- Disinfectant-Ready enclosures treated with anti-microbial additives (ISO22196 and JISZ 2801 compliant models available)
- Motionix™ motion-sensing technology for seamless reading mode transitions
- Omnidirectional reading of 1D, 2D and postal codes plus stacked and composite codes
- Extremely snappy reading performance
- Extended reading distances and improved capability of reading small, condensed, curved, poorly printed, and reflective bar codes
- Advanced motion tolerance optics
- Highly visible 4-Dot aimer with center cross for targeted scanning
- Image capture and document scanning capabilities
- Datalogic's patented 'Green Spot' technology and exclusive 3GL™ (3 Green Lights) for superior good-read feedback
- USB Certified Kits Available

### ISO22196 Compliant Models Available

### WIRELESS MODELS

- Choice of Bluetooth wireless technology version 4.0 with BLE or Datalogic's STAR Cordless System (radio frequencies available in 433 MHz or 910 MHz)
- Datalogic's distinctive Wireless Battery Charging System
- Adjustable position cradle with Scan-While-Charging capability
- Batch Mode capability
- Point-to-point / Point-to-multi-point transmission
- Long lasting user-replaceable Lithium-Ion battery
- Vibration feedback

## DECODING CAPABILITY

1D / LINEAR CODES	Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes.
2D CODES	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code
POSTAL CODES	Australian Post; British Post; China Post; IMB; Japanese Post; KIX Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)
STACKED CODES	EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites

## ELECTRICAL

CURRENT	Operating: <300 mA @ 5V; < 200 mA @ 12V Standby/Idle: < 90 mA @ 5V; <50 mA @ 12V
INPUT VOLTAGE	GD4520: 5 VDC GD4590: 4.5 - 14.0 VDC

## ENVIRONMENTAL

AMBIENT LIGHT	0 - 100,000 lux
DROP RESISTANCE	Withstands repeated drops from 1.8 m / 6.0 ft onto a concrete surface.
ESD PROTECTION (AIR DISCHARGE)	16 kV
HUMIDITY (NON-CONDENSING)	0 - 95%
PARTICULATE AND WATER SEALING	IP52
TEMPERATURE	Operating: 0 to 50 °C / 32 to 122 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

## INTERFACES

INTERFACES	GD4520: USB only GD4590: RS-232 / USB / Keyboard Wedge Multi-Interface
------------	---

## PHYSICAL CHARACTERISTICS

COLORS AVAILABLE	Light Green/Light Grey (Rubber/Plastic)
DIMENSIONS	16.6 x 6.8 x 10.9 cm / 6.5 x 2.7 x 4.3 in
WEIGHT	161.0 g / 5.7 oz

## READING PERFORMANCE

IMAGE CAPTURE	Graphic Formats: BMP, JPEG, TIFF; Greyscale: 256, 16, 2 1 Megapixel: 1280 x 800 pixels
IMAGER SENSOR	Beeper (Adjustable Tone); Datalogic Three Green
LIGHT SOURCE	Aiming: Red Laser 650 nm Illumination: Warm White 35 IPS
MOTION TOLERANCE	15%
PRINT CONTRAST RATIO (MINIMUM)	Pitch: +/- 65°; Roll (Tilt): 360°; Skew (Yaw): +/- 65°
READING ANGLE	Beeper (Adjustable Tone); Datalogic Three Green
READING INDICATORS	Lights (3GL) Good Read Feedback: Datalogic 'Green Spot' on the Code, Dual Good Read LEDs
RESOLUTION (MAXIMUM)	High Density (HD): 1D Linear: 0.077 mm / 3 mils; PDF417: 0.077 mm / 3 mils; Data Matrix: 0.102 mm / 4 mils Standard Range (SR): 1D Linear: 0.102 mm / 4 mils; PDF417: 0.127 mm / 5 mils; Data Matrix: 0.195 mm / 7.5 mils

## READING RANGES

TYPICAL DEPTH OF FIELD	Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent.
------------------------	---

### GD4500 Standard Range (SR)

Code 39: 5 mils: 7.0 to 38.0 cm / 2.7 to 14.9 in
Code 39: 10 mils: 2.2 to 58.0 cm / 0.8 to 22.8 in
Data Matrix: 10 mils: 5.5 to 27.0 cm / 2.2 to 10.6 in
Data Matrix: 15 mils: 2.8 to 41.0 cm / 1.1 to 16.1 in
EAN-13: 13 mils: 1.0 to 71.0 cm / 0.4 to 27.9 in
PDF417: 10 mils: 2.5 to 41.0 cm / 1.0 to 16.1 in
QR Code: 10 mils: 5.5 to 24.0 cm / 2.2 to 9.5 in

### GD4500 High Density (HD)

Code 39: 3 mils: 5.0 to 15.0 cm / 2.0 to 5.9 in
Code 39: 5 mils: 0.5 to 25.0 cm / 0.2 to 9.8 in
Data Matrix: 5 mils: 5.5 to 9.0 cm / 2.2 to 3.5 in
Data Matrix: 10 mils: 2.0 to 27.0 cm / 0.8 to 10.6 in
EAN-13: 7.5 mils: 2.0 to 23.5 cm / 0.8 to 9.3 in
EAN-13: 13 mils: 1.0 to 40.0 cm / 0.4 to 15.7 in
PDF417: 4 mils: 3.0 to 12.0 cm / 1.2 to 4.7 in
PDF417: 10 mils: 0.5 to 31.0 cm / 0.2 to 12.2 in
QR Code: 10 mils: 2.0 to 25.0 cm / 0.8 to 9.8 in

## SAFETY & REGULATORY

AGENCY APPROVALS	The product meets necessary safety and regulatory approvals for its intended use. The Quick Reference Guide for this product can be referred to for a complete list of certifications.
ENVIRONMENTAL COMPLIANCE	Complies to China RoHS; Complies to EU RoHS
LASER CLASSIFICATION	Caution Laser Radiation - Do not stare into beam; IEC 60825 Class 2

## UTILITIES

DATALOGIC ALADDIN™	Datalogic Aladdin configuration program is available for download at no charge.
OPOS / JAVAPOS	JavaPOS and OPOS Utilities are available for download at no charge.
REMOTE HOST DOWNLOAD	Lowers service costs and improves operations

## WARRANTY

WARRANTY	5-Year Factory Warranty
----------	-------------------------

## DATALOGIC DISINFECTANT-READY ENCLOSURES FOR HEALTHCARE

Datalogic offers bar code readers designed specifically for the healthcare industry with Disinfectant-Ready enclosures treated with anti-microbial additives that can help fight against the spreading of germs. This is particularly important if the scanner is traveling room-to-room on a medication cart with a nurse. The Disinfectant-Ready enclosures can withstand daily cleaning with harsh chemical cleaning solutions commonly used in a healthcare environment.



PRODUCT	CHEMICAL CONTENT
Sani-Cloth® HB, Sani-Cloth® Plus, Super Sani-Cloth®	Quaternary Ammonium Chloride solution
Hepacide Quat II	Virucidal disinfectant cleaner
Alcohol Wipes	70% Isopropyl Alcohol
CaviWipes™	Isopropanol 10-20%; Ethylene Glycol Monobutyl Ether 1-5%
Virex® 256	n-Alkyl Dimethyl Benzyl Ammonium Chloride; Didecyl Dimethyl Ammonium Chloride
409® Glass and Surface Cleaner	n-Alkyl Dimethyl Benzyl Ammonium Chloride; n-Propoxypropanol
Windex® Blue	Isopropyl Alcohol
Clorox® Bleach	Sodium Hypochlorite; Sodium Hydroxide
100% Gentle dish soap and water	

REFER TO THE DEVICE INSTRUCTION MANUAL FOR PROPER CLEANING METHODS WHEN USING THESE CHEMICALS. DISINFECTANTS SHOULD NOT BE SPRAYED OR Poured ONTO THE SCANNER UNIT. THE SCANNERS MUST ALWAYS BE WIPED DRY AFTER DISINFECTING.

## CORDLESS COMMUNICATIONS

DATALOGIC STAR CORDLESS SYSTEM™	Effective Radiated Power: 433.92 MHz: < 6.3 mW; 910 MHz: < 50 mW Multi-Point Configuration: Max. Readers per Radio Receiver: 16; Point-to-Point Configuration; Radio Frequency: 433.92 MHz; 910 MHz; Two Way Communications Radio Range (Open Air): 50.0 m / 164.0 ft; Range distances are measured using the base station.
---------------------------------	---

## DECODING CAPABILITY

1D / LINEAR CODES	Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes.
2D CODES	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code
POSTAL CODES	Australian Post; British Post; China Post; IMB; Japanese Post; KIX Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)
STACKED CODES	EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites

## ELECTRICAL

BATTERY	Battery Type: Lithium-Ion: 3250 mAh Charge Time: External Power: 4 Hours @ 12 VDC; Reads per Charge: 80,000
CRADLE INDICATOR LEDS	Battery Charging (flashing orange); Charge Completed (steady green)
CURRENT	Charging (Typical): < 6 W; Scanner only: 330 mA @ 3.7 V (Operative) Cradle Only: 80 mA @ 5 V (Operative)
INPUT VOLTAGE	4.5 - 14 VDC +/- 5%

## ENVIRONMENTAL

AMBIENT LIGHT	0 - 100,000 lux
DROP RESISTANCE	Withstands repeated drops from 1.8 m / 6.0 ft onto a concrete surface.
ESD PROTECTION (AIR DISCHARGE)	16 kV
HUMIDITY (NON-CONDENSING)	0 - 95%
PARTICULATE AND WATER SEALING	IP52
TEMPERATURE	Operating: 0 to 50 °C / 32 to 122 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

## INTERFACES

INTERFACES	RS-232 / USB / Keyboard Wedge Multi-Interface
------------	---

## PHYSICAL CHARACTERISTICS

COLORS AVAILABLE	Light Green/Light Grey (Rubber/Plastic)
DIMENSIONS	16.6 x 6.8 x 10.9 cm / 6.5 x 2.7 x 4.3 in
WEIGHT	235 g / 8.29 oz
ENCLOSURE	Disinfectant-Ready Enclosure Treated with Anti-Microbial Additives (ISO22196 and JISZ 2801 compliant models available)

## READING PERFORMANCE

IMAGE CAPTURE	Graphic Formats: BMP, JPEG, TIFF; Greyscale: 256, 16, 2
IMAGER SENSOR	1 Megapixel: 1280 x 800 pixels
LIGHT SOURCE	Aiming: Red Laser 650 nm Illumination: Warm White
MOTION TOLERANCE	35 IPS
PRINT CONTRAST RATIO (MINIMUM)	15%
READING ANGLE	Pitch: +/- 65°; Roll (Tilt): 360°; Skew (Yaw): +/- 65°
READING INDICATORS	Beeper (adjustable tone); Vibration feedback option available for quiet places; Datalogic Three Green Lights (3GL) Good Read Feedback; Datalogic 'Green Spot' on the Code, Dual Good Read LEDs
RESOLUTION (MAXIMUM)	High Density (HD): 1D Linear: 0.077 mm / 3 mils; PDF417: 0.077 mm / 3 mils; Data Matrix: 0.102 mm / 4 mils Standard Range (SR): 1D Linear: 0.102 mm / 4 mils; PDF417: 0.127 mm / 5 mils; Data Matrix: 0.195 mm / 7.5 mils

## READING RANGES

TYPICAL DEPTH OF FIELD	Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent.
	<b>GM4500 Standard Range (SR)</b> Code 39: 5 mils: 7.0 to 38.0 cm / 2.7 to 14.9 in Code 39: 10 mils: 2.2 to 58.0 cm / 0.8 to 22.8 in Data Matrix: 10 mils: 5.5 to 27.0 cm / 2.2 to 10.6 in Data Matrix: 15 mils: 2.8 to 41.0 cm / 1.1 to 16.1 in EAN-13: 13 mils: 1.0 to 71.0 cm / 0.4 to 27.9 in PDF417: 10 mils: 2.5 to 41.0 cm / 1.0 to 16.1 in QR Code: 10 mils: 5.5 to 24.0 cm / 2.2 to 9.5 in

## SAFETY & REGULATORY

AGENCY APPROVALS	The product meets necessary safety and regulatory approvals for its intended use. The Quick Reference Guide for this product can be referred to for a complete list of certifications.
ENVIRONMENTAL COMPLIANCE	Complies to China RoHS; Complies to EU RoHS
LASER CLASSIFICATION	Caution Laser Radiation - Do not stare into beam; IEC 60825 Class 2

## UTILITIES

DATALOGIC ALADDIN™	Datalogic Aladdin configuration program is available for download at no charge.
OPOS / JAVAPOS	JavaPOS and OPOS Utilities are available for download at no charge.
REMOTE HOST DOWNLOAD	Lowers service costs and improves operations

## WARRANTY

WARRANTY	3-Year Factory Warranty
----------	-------------------------

## TECHNICAL SPECIFICATIONS

### CORDLESS COMMUNICATIONS

BLUETOOTH WIRELESS TECHNOLOGY	Piconet: Max. Readers per Radio Receiver: 7 Profiles; SPP (Serial Port Profile) Protocol: Bluetooth 4.0 with BLE Certified Class 1, Class 2 and Class 3; Radio Frequency: 2.4 GHz Radio Range (Open Air): 100.0 m / 328.0 ft; Range distances are measured using the base station. Range with connection to other Bluetooth peripherals may show different results. Security: Data Encryption; Scanner Authentication
-------------------------------	---

### DECODING CAPABILITY

1D / LINEAR CODES	Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes.
2D CODES	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code
POSTAL CODES	Australian Post; British Post; China Post; IMB; Japanese Post; KIX Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)
STACKED CODES	EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites

### ELECTRICAL

BATTERY	Battery Type: Lithium-Ion: 3250 mAh Charge Time: External Power: 4 Hours @ 12 VDC; Reads per Charge: 80,000
CRADLE INDICATOR LEDS	Battery Charging (flashing orange); Charge Completed (steady green)
CURRENT	Charging (Typical): < 6 W; Gun Only: 330 mA @ 3.7 V (Operative) Cradle Only: 80 mA @ 5 V (Operative)
INPUT VOLTAGE	4.5 - 14 VDC +/- 5%

### ENVIRONMENTAL

AMBIENT LIGHT	0 - 100,000 lux
DROP RESISTANCE	Withstands repeated drops from 1.8 m / 6.0 ft onto a concrete surface.
ESD PROTECTION (AIR DISCHARGE)	16 kV
HUMIDITY (NON-CONDENSING)	0 - 95%
PARTICULATE AND WATER SEALING	IP52
TEMPERATURE	Operating: 0 to 50 °C / 32 to 122 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

### INTERFACES

INTERFACES	RS-232 / USB / Keyboard Wedge Multi-Interface
------------	---

### PHYSICAL CHARACTERISTICS

COLORS AVAILABLE	Light Green/Light Grey (Rubber/Plastic)
DIMENSIONS	16.6 x 6.8 x 10.9 cm / 6.5 x 2.7 x 4.3 in
WEIGHT	235 g / 8.29 oz
ENCLOSURE	Disinfectant-Ready Enclosure Treated with Anti-Microbial Additives (ISO22196 and JISZ 2801 compliant models available)

### READING PERFORMANCE

IMAGE CAPTURE	Graphic Formats: BMP, JPEG, TIFF; Greyscale: 256, 16, 2
IMAGER SENSOR	1 Megapixel: 1280 x 800 pixels
LIGHT SOURCE	Aiming: Red Laser 650 nm Illumination: Warm White
MOTION TOLERANCE	35 IPS
PRINT CONTRAST RATIO (MINIMUM)	15%
READING ANGLE	Pitch: +/- 65°; Roll (Tilt): 360°; Skew (Yaw): +/- 65°
READING INDICATORS	Beeper (adjustable tone); Vibration feedback option available for quiet places; Datalogic Three Green Lights (3GL) Good Read Feedback; Datalogic 'Green Spot' on the Code, Dual Good Read LEDs
RESOLUTION (MAXIMUM)	High Density (HD): 1D Linear: 0.077 mm / 3 mils; PDF417: 0.077 mm / 3 mils; Data Matrix: 0.102 mm / 4 mils Standard Range (SR): 1D Linear: 0.102 mm / 4 mils; PDF417: 0.127 mm / 5 mils; Data Matrix: 0.195 mm / 7.5 mils

### READING RANGES

TYPICAL DEPTH OF FIELD	Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent.
------------------------	---

### GBT4500 Standard Range (SR)

Code 39: 5 mils: 7.0 to 38.0 cm / 2.7 to 14.9 in
Code 39: 10 mils: 2.2 to 58.0 cm / 0.8 to 22.8 in
Data Matrix: 10 mils: 5.5 to 27.0 cm / 2.2 to 10.6 in
Data Matrix: 15 mils: 2.8 to 41.0 cm / 1.1 to 16.1 in
EAN-13: 13 mils: 1.0 to 71.0 cm / 0.4 to 27.9 in
PDF417: 10 mils: 2.5 to 41.0 cm / 1.0 to 16.1 in
QR Code: 10 mils: 5.5 to 24.0 cm / 2.2 to 9.5 in

### GBT4500 High Density (HD)

Code 39: 3 mils: 5.0 to 15.0 cm / 2.0 to 5.9 in
Code 39: 5 mils: 0.5 to 25.0 cm / 0.2 to 9.8 in
Data Matrix: 5 mils: 5.5 to 9.0 cm / 2.2 to 3.5 in
Data Matrix: 10 mils: 2.0 to 27.0 cm / 0.8 to 10.6 in
EAN-13: 7.5 mils: 2.0 to 23.5 cm / 0.8 to 9.3 in
EAN-13: 13 mils: 1.0 to 40.0 cm / 0.4 to 15.7 in
PDF417: 4 mils: 3.0 to 12.0 cm / 1.2 to 4.7 in
PDF417: 10 mils: 0.5 to 31.0 cm / 0.2 to 12.2 in
QR Code: 10 mils: 2.0 to 25.0 cm / 0.8 to 9.8 in

### SAFETY & REGULATORY

AGENCY APPROVALS	The product meets necessary safety and regulatory approvals for its intended use. The Quick Reference Guide for this product can be referred to for a complete list of certifications.
ENVIRONMENTAL COMPLIANCE	Complies to China RoHS; Complies to EU RoHS
LASER CLASSIFICATION	Caution Laser Radiation - Do not stare into beam; IEC 60825 Class 2

### UTILITIES

DATALOGIC ALADDIN™	Datalogic Aladdin configuration program is available for download at no charge.
OPOS / JAVAPOS	JavaPOS and OPOS Utilities are available for download at no charge.
REMOTE HOST DOWNLOAD	Lowers service costs and improves operations

### WARRANTY

WARRANTY	3-Year Factory Warranty
----------	-------------------------

## ACCESSORIES

### All Products

#### Mounts/Stands



• 11-0362: Holder, Multi-Purpose, Grey



• HLD-G041-WH Desk/Wall Holder, G041, White



• STD-G041-WH Basic Stand, G041, White

### Cordless Products

#### Battery/Battery Charger

- MC-GM45 Battery Charger, 4-Slot
- RBP-GM45 Removable Battery Pack



#### Base Stations/Chargers

- WLC4090-HC-BT Base station; Wireless Charger; Multi-Interface; HC; Bluetooth
- WLC4090-HC-433 Base station; Wireless Charger; Multi-Interface; HC; 433 MHz
- WLC4090-HC-910 Base station; Wireless Charger; Multi-Interface; HC; 910 MHz

