

## Specifications HI97734 Free and Total Chlorine HR

| Chlorine     Resolution<br>(all methods)     0.01 mg/L       Accuracy @25°C(77°F)<br>(all methods)     ±0.03 mg/L ±3% of reading at 25 °C       Method     Adaptation of EPA DPD method 330.5       Light Source     light emitting diode       Bandpass filter     525 nm       Bandpass filter     525 nm       Bandpass filter     525 nm       Bandpass filter     8 nm       Upht Detector     silicon photocell       Cuvette type     round 24.6 mm diameter (22 mm inside)       Cuvette type     round 24.6 mm diameter (22 mm inside)       Display     128 x 64 pixel B/W LCD with backlight       Auto logging     50 readings       Display     128 x 64 pixel B/W LCD with backlight       Auto-off     after 15 minutes of inactivity (30 minutes before a READ measurement)       Specifications     Battery type / Life     alkaline 1.5 V AA (3) / > 800 measurements (without backlight)       Environment     0 to 50°C (32 to 122°F): 0 to 100% RH, non-serviceable       Dimensions     142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0°)       Weight     380 g (13.4 o.2)       HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5 V AA batteries (3), instrument quality c                                                                                              | Chlorine | Range<br>(all methods)                                                                                                                                                                                          | 0.00 to 10.00 mg/L (as Cl <sub>2</sub> )                       |
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| (all methods) ±0.03 mg/L ±39% of reading at 25 °C   Method Adaptation of EPA DPD method 330.5   Light Source light emitting diode   Bandpass filter 525 nm   Bandpass filter 8 nm   Bandpass filter 8 nm   Wavelength accuracy ±1.0 nm   Light Detector silicon photocell   Cuvette type round 24.6 mm diameter (22 mm inside)   Auto logging 50 readings   Display 128 x 64 pixel B/W LCD with backlight   Auto off after 15 minutes of inactivity (30 minutes before a READ measurement)   Battery type / Life alkaline 1.5 V AA (3) / > 800 measurements (without backlight)   Environment 0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable   Dimensions 142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")   Weight 380 g (13.4 oz.)   HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.   CAL Check standard setting respents soid separately   HI97734. HI97734-11 CAL Check standard cuvettes for free and total chlorine HR   Reagents and Standards HI97734.                                                                                                                                                                                                                 |          |                                                                                                                                                                                                                 | 0.01 mg/L                                                      |
| Measurement   Light Source   light emitting diode     Bandpass filter   525 nm     Bandpass filter   8 nm     Bandpass filter   9 nm     Bandpass filter   9 nm     Bandpass filter   9 nm     Uight Detector   silicon photocell     Cuvette type   round 24.6 mm diameter (22 mm inside)     Auto logging   50 readings     Display   128 x 64 pixel B/W LCD with backlight     Auto-off   after 15 minutes of inactivity (30 minutes before a READ measurement)     Battery type / Life   alkaline 1.5 V AA (3) > 800 measurements (without backlight)     Environment   0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable     Dimensions   142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")     Weight   380 g (13.4 oz.)     HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), .1.5V AA batteries (3), instrument quality certificate, and instruction manual. CAL Check standards and testingreagents sold separately     HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), .1.5V AA batteries (3), instrument quality certificate, instruction manual, and H/7101412 rigid carrying case.     Reagents and Standards   HI97734                                                                                                                  |          |                                                                                                                                                                                                                 | ±0.03 mg/L ±3% of reading at 25 °C                             |
| Measurement   Bandpass filter   525 nm     Bandpass filter   B nm     Bandpass filter   B nm     Bandpass filter   wavelength accuracy     Light Detector   silicon photocell     Cuvette type   round 24.6 mm diameter (22 mm inside)     Auto logging   50 readings     Display   128 x 64 pixel B/W LCD with backlight     Auto-off   after 15 minutes of inactivity (30 minutes before a READ measurement)     Battery type / Life   alkaline 1.5 V AA (3) / > 800 measurements (without backlight)     Environment   0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable     Dimensions   142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")     Weight   380 g (13.4 oz.)     HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual. CAL Check standards and testing reagents sold separately     HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standards and testing reagents sold separately     Reagents and Standards   HI97734     HI97734-11 CAL Check standard cuvettes for free and total chlorine HR     HI97734-01 free and total chlorine HR     HI97734-01 free and |          | Method                                                                                                                                                                                                          | Adaptation of EPA DPD method 330.5                             |
| Measurement<br>SystemBandpass filter<br>bandwidthB nmBandpass filter<br>wavelength accuracy±1.0 nmLight Detectorsilicon photocellCuvette typeround 24.6 mm diameter (22 mm inside)Additional<br>SpecificationsAuto logging50 readingsDisplay128 x 64 pixel B/W LCD with backlightAuto-offafter 15 minutes of inactivity (30 minutes before a READ<br>measurement)Battery type / Lifealkaline 1.5 V AA (3) / > 800 measurements (without backlight)Environment0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceableDimensions142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")Weight380 g (13.4 oz.)HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standard sand testing reagents sold separatelyHI97734 cincludes photometer, CAL Check standards, sample cuvettes (2), sample caps<br>(2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, instruction manual.<br>CAL Check standard certificates, instrument quality certificate, instruction manual.<br>CAL Check standard certificates, instrument quality certificate, instruction manual, and<br>                                                                                                                |          | Light Source                                                                                                                                                                                                    | light emitting diode                                           |
| Measurement<br>SystembandwidthB nmBandpass filter<br>wavelength accuracy±1.0 nmLight Detectorsilicon photocellCuvette typeround 24.6 mm diameter (22 mm inside)Auto logging50 readingsDisplay128 x 64 pixel B/W LCD with backlightAuto-offafter 15 minutes of inactivity (30 minutes before a READ<br>measurement)Battery type / Lifealkaline 1.5 V AA (3) / > 800 measurements (without backlight)Environment0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceableDimensions142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")Weight380 g (13.4 oz.)HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2),<br>1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standard caretificates, instrument quality certificate, instruction manual,<br>and HI7101412 rigid carrying case.<br>Reagents and<br>StandardsHI97734-11 CAL Check standard cuvettes<br>for free and total chlorine HR<br>HI93734-01 free and total chlorine HR<br>HI93734-01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                |          | Bandpass filter                                                                                                                                                                                                 | 525 nm                                                         |
| Dampass Intel<br>wavelength accuracy   ±1.0 nm     Light Detector   silicon photocell     Cuvette type   round 24.6 mm diameter (22 mm inside)     Auto logging   50 readings     Display   128 x 64 pixel B/W LCD with backlight     Auto-off   after 15 minutes of inactivity (30 minutes before a READ<br>measurement)     Battery type / Life   alkaline 1.5 V AA (3) / > 800 measurements (without backlight)     Environment   0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable     Dimensions   142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")     Weight   380 g (13.4 oz.)     HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standards and testing reagents sold separately     HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors,<br>CAL Check standard certificates, instrument quality certificate, instruction manual, and<br>HI7101412 rigid carrying case.<br>Reagents sold separately     Reagents and<br>Standards   HI97734                                                                                                                           |          |                                                                                                                                                                                                                 | 8 nm                                                           |
| Cuvette typeround 24.6 mm diameter (22 mm inside)Auto logging50 readingsDisplay128 x 64 pixel B/W LCD with backlightAdditionalAuto-offSpecificationsBattery type / LifeBattery type / Lifealkaline 1.5 V AA (3) / > 800 measurements (without backlight)Environment0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceableDimensions142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")Weight380 g (13.4 oz.)HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standards and testing reagents sold separatelyOrdering<br>InformationHI97734 cincludes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificates, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case.<br>Reagents and StandardsHI97734-11 CAL Check standard cuvettes for free and total chlorine HR<br>HI93734-01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                            |          |                                                                                                                                                                                                                 | ±1.0 nm                                                        |
| Additional<br>SpecificationsAuto logging50 readingsAdditional<br>SpecificationsDisplay128 x 64 pixel B/W LCD with backlight<br>after 15 minutes of inactivity (30 minutes before a READ<br>measurement)Battery type / Lifealkaline 1.5 V AA (3) / > 800 measurements (without backlight)<br>Environment0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceableDimensions142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")Weight380 g (13.4 oz.)HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2),<br>1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standards and testing reagents sold separatelyOrdering<br>InformationHI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps<br>(2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors,<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          | Light Detector                                                                                                                                                                                                  | silicon photocell                                              |
| Additional<br>SpecificationsDisplay128 x 64 pixel B/W LCD with backlight<br>after 15 minutes of inactivity (30 minutes before a READ<br>measurement)Additional<br>SpecificationsAuto-offafter 15 minutes of inactivity (30 minutes before a READ<br>measurement)Battery type / Lifealkaline 1.5 V AA (3) / > 800 measurements (without backlight)Environment0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceableDimensions142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")Weight380 g (13.4 oz.)HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2),<br>1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standards and testing reagents sold separatelyOrdering<br>InformationHI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps<br>(2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors,<br>CAL Check standard certificates, instrument quality certificate, instruction manual, and<br>HI7101412 rigid carrying case.<br>Reagents sold separatelyReagents and<br>StandardsHI97734HI97734-01 free and total chlorine HR<br>HI93734-01 free and total chlorine HR reagent for 100 tests                                                                                                     |          | Cuvette type                                                                                                                                                                                                    | round 24.6 mm diameter (22 mm inside)                          |
| Additional<br>SpecificationsAuto-offafter 15 minutes of inactivity (30 minutes before a READ<br>measurement)Battery type / Lifealkaline 1.5 V AA (3) / > 800 measurements (without backlight)Environment0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceableDimensions142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")Weight380 g (13.4 oz.)HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2),<br>1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standards and testing reagents sold separatelyOrdering<br>InformationHI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps<br>(2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors,<br>CAL Check standard certificates, instrument quality certificate, instruction manual, and<br>HI7101412 rigid carrying case.<br>Reagents and<br>StandardsHI97734-11 CAL Check standard cuvettes<br>for free and total chlorine HR<br>HI93734-01 free and total chlorine HR                                                                                                                                                                                                                                                                           |          | Auto logging                                                                                                                                                                                                    | 50 readings                                                    |
| Additional<br>Specifications   Auto-off   measurement)     Battery type / Life   alkaline 1.5 V AA (3) / > 800 measurements (without backlight)     Environment   0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable     Dimensions   142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")     Weight   380 g (13.4 oz.)     HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.     CAL Check standards and testing reagents sold separately     HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificates, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case.     Reagents and Standards   HI97734     HI97734.01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                                                                                                                  |          | Display                                                                                                                                                                                                         | 128 x 64 pixel B/W LCD with backlight                          |
| Environment   0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable     Dimensions   142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")     Weight   380 g (13.4 oz.)     HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.     CAL Check standards and testing reagents sold separately     HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificates, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case.     Reagents and Standards   HI97734     HI97734   HI97734-11 CAL Check standard cuvettes for free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Auto-off                                                                                                                                                                                                        |                                                                |
| Dimensions   142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")     Weight   380 g (13.4 oz.)     HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.     CAL Check standards and testing reagents sold separately     HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificates, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case.     Reagents and Standards   HI97734     HI97734.   HI97734-11 CAL Check standard cuvettes for free and total chlorine HR     HI97734-01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          | Battery type / Life                                                                                                                                                                                             | alkaline 1.5 V AA (3) / > 800 measurements (without backlight) |
| Weight 380 g (13.4 oz.)   Weight 380 g (13.4 oz.)   HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2),<br>1.5V AA batteries (3), instrument quality certificate, and instruction manual.<br>CAL Check standards and testing reagents sold separately   HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps<br>(2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors,<br>CAL Check standard certificates, instrument quality certificate, instruction manual, and<br>HI7101412 rigid carrying case.<br>Reagents sold separately   Reagents and<br>Standards HI97734                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          | Environment                                                                                                                                                                                                     | 0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable         |
| Ordering   HI97734 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual.     CAL Check standards and testing reagents sold separately   HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificates, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case.     Reagents and Standards   HI97734     HI97734   HI97734-11 CAL Check standard cuvettes for free and total chlorine HR     HI97734-01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          | Dimensions                                                                                                                                                                                                      | 142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")                     |
| Ordering   1.5V AA batteries (3), instrument quality certificate, and instruction manual.     CAL Check standards and testing reagents sold separately     HI97734C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificates, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case.     Reagents and Standards   HI97734     HI97734.11 CAL Check standard cuvettes for free and total chlorine HR     HI97734-01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          | Weight                                                                                                                                                                                                          | 380 g (13.4 oz.)                                               |
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| Reagents and<br>Standards HI97734 for free and total chlorine HR   HI93734-01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          | (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors,<br>CAL Check standard certificates, instrument quality certificate, instruction manual, and<br>HI7101412 rigid carrying case. |                                                                |
| Standards HI93734-01 free and total chlorine HR reagent for 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          | HI97734                                                                                                                                                                                                         |                                                                |
| HI93734-03 free and total chlorine HR reagent for 300 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |                                                                                                                                                                                                                 | HI93734-01 free and total chlorine HR reagent for 100 tests    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |                                                                                                                                                                                                                 | HI93734-03 free and total chlorine HR reagent for 300 tests    |

#### ติดต่อบริษัท นีโอนิคส์ จำกัด Tel: 098-479-5684 หรือ 061-8268939 E-mail: sale@tools.in.th หรือ sale@neonics.co.th

#### HI97734

# Free and Total Chlorine HR Portable Photometer

## Advanced LED optical system

- Innovative optical design that utilizes a reference detector and focusing lens to eliminate errors from changes in the light source and from imperfections in the glass cuvette.
- LEDs have a much higher luminous efficiency, providing more light while using less power. They also produce little heat, which could otherwise affect electronic stability.

## • CAL Check™

 Validate instrument performance at any time using CAL Check cuvettes made with NIST traceable standards. The CAL Check screen guides the user step-by-step through the validation process and user calibration.

### • On-screen tutorial mode with animations

- Guides users step-by-step through the measurement process
- Waterproof and floating IP67 case
- Unit of measure is displayed along with reading

#### • Built-in timer

• Built-in reaction timer that ensures consistency between tests.

#### • Error messages on display

- Alerts to problems including no cap, high zero, and standard too low
- GLP data
  - Displays the last calibration date.
- Auto logging
- Battery status indicator
- Auto-shut off

## Significance of Use

Chlorine is one of the most cost-effective disinfectants used in a variety of different applications. Its use varies from light application in surface sanitation, to heavy duty disinfection of medical devices, to removal of microorganism infections in piping systems. The advantage of using chlorine over peroxide-type disinfectants is that chlorine is not only a strong oxidant, it also is capable of breaking tough chemical bonds found in cell walls or biofilms. Correct and effective use of chlorine helps to destroy disease-causing pathogens, reduce odors, and eliminate bacteria.

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