

Bilicare

Intensive Phototherapy

INTENSIVE PHOTOTHERAPY

The efficiency of phototherapy depends on the amount of bilirubin that is irradiated. Bilicare distributes homogeneous and better light penetration around the whole-body surface than conventional phototherapy units. Bilicare provides 360° phototherapy light and evenly distributes irradiance all around baby's body to improve the treatment of neonatal unconjugated hyperbilirubinemia and reduce phototherapy time.

One of the key points in the practical execution of phototherapy is the distance between infant and light sources. Bilicare covers much more of baby's body with effective spectral irradiance than conventional phototherapy units. This significantly eliminates most of the blood transfusions for the infants.

Bilicare emits its light in the most clinical effective range of 450-470 nm. Bilicare covers the most peak absorption wavelength (458 nm) at which bilirubin is broken down and does not emit light in the ultraviolet (UV) range which is increasing the potential risk of skin damage. Bilicare does not emit light in the infrared radiation (IR) range reducing the potential risk of fluid loss. Bilicare has light intensity control from 0 to 100% as well as optional irradiance control for individual needs of patient's.

Okuman offers a comprehensive range of phototherapy products for any level of clinical application. Bilicare intensive phototherapy units have special design for optimized phototherapy applications in most NICU with different features.

BC 050

3.5" Color Touch Screen

Adjustable Spectral Irradiance: 5° to 100%

Hi/Low Skin Temp. Alarms: 30 °C to 38.5 °C

32 pcs Super Blue Therapy LEDs

8 pcs Examination LEDs

Marker Light for Effective Surface Area

Effective Surface Area @40cm: 50x30cm

Vertical Height Adjustment

360° Rotatable and up to 40° Tilt

Real Time Clock and Date

Up- Down Counter for Treatment Time: 0 to 999 hours

Alternative Mountings for Incubator, Crib and Warmers

Skin Temperature Measurement

High/Low Skin Temperature Alarm

Silence Operation with Noise Level of ≤ 20dB(A)

Fanless SMPS& Natural Cooling Design

Physical Specifications

Overall Dimensions (L x W x H): 650 mm x 500 mm x 1850mm

Phototherapy Light (L x W x H): 485 mm x 230 mm x 100 mm

Weight of Phototherapy Light: 3 kg

Total Unit Weight: 19 kg

Footprint (L x W): 650 mm x 500 mm

Height: 1450 mm to 1850 mm

Electrical Input: 100-240 VAC, 50/60 Hz, 1A 25 W





Optional Eco Version

- Economic trolley with 32 pcs. Blue treatment LEDs and 3.5 inches color TFT control
- Optional Skin temperature measurement
- Timer, adjustable special irradiance, vertical height adjustment & rotatable with tilt option

Note: Trolley design can change without further notice as per request

Common Features of BC 250 and BC 350

Intensive phototherapy with maximum irradiation

360° uniform and simultaneous phototherapy

Custom made control panel for all kinds of clinical use

Adjustable light intensity for full term and premature babies

Up/Down treatment timer

Acrylic light shield for the protection of people around

Washable hammock

Sliding out bed that allows easy access to infant

Monitor shelf

Left and right lateral rails for protection

Height adjustment (Manual or Electrical)

Dual wheel castors with separate locking mechanism

BC 250 INTENSIVE PHOTOTHERAPY

LED display with soft buttons

16x60 LED blue therapy lamps

4 presets for light intensity

Up/Down treatment timer

Remote control for light intensity

Lamp life timer

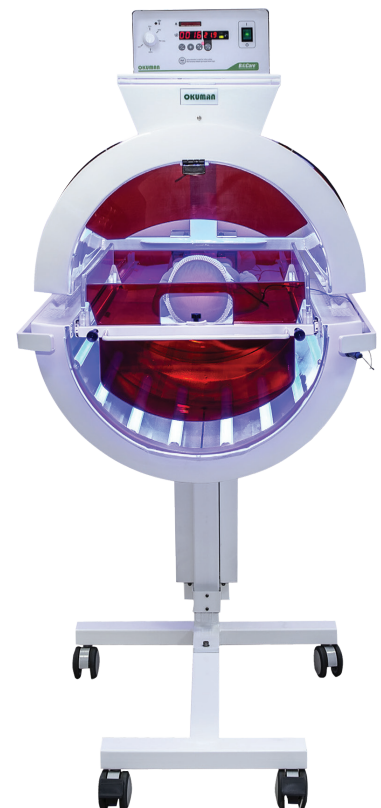
Air and skin temperature measurement

Audio and visual alarms

Hi/Low alarms for skin and air temperature

Manual height adjustment of the upper hood

Optional fanless system for silent operation



BC 250

Control Panel

- LED display for timer
- LED display for skin and air temperature
- Hi/Low skin and air temperature alarms
- Audio and visual alarms
- Treatment time adjustment
- Light intensity adjustment



Remote Control

- On/Off function
- Light intensity adjustment
- 4 different presets for light intensity
- Button adjustments between 0 to 100%
- User programmable 4 light intensity memory buttons

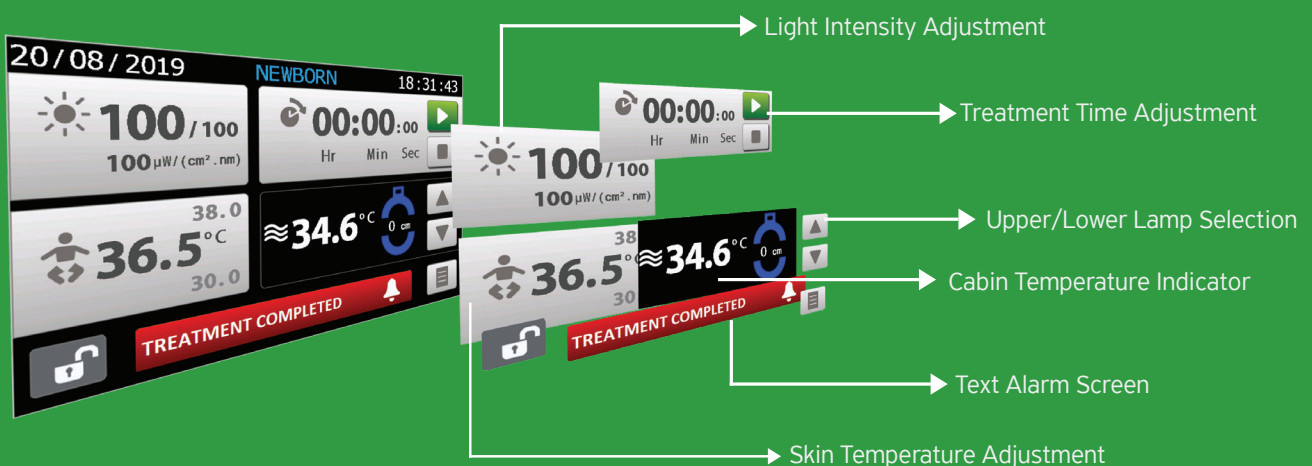
BC 250 LCD INTENSIVE PHOTOTHERAPY

- 5" color touch screen
- Adjustable spectral irradiance in $\mu\text{W}/\text{cm}^2/\text{nm}$
- Selectable up/down 180° or 360° phototherapy
- 16*60 LED blue therapy lamps
- Up/Down treatment timer
- Air&skin temperature monitoring with hi/low alarms
- Patient information menu (name, ID, TSB, gender)
- Multiple language support
- Auto or manual height adjustment
- Adaptive temperature control system
- Trend information for monitored parameters
- Display lamp life timer with warning alarm
- Upper&Lower lamp selection feature



BC 250 LCD

LCD Display (5" TFT Color Touch Screen)



BC 350 INTENSIVE PHOTOTHERAPY

7" color touch screen

Adjustable spectral irradiance in $\mu\text{W}/\text{cm}^2/\text{nm}$

Selectable up/down 180° or 360° phototherapy

16x60 LEDs blue therapy lamps

Up/Down counter for treatment time

Air&skin temperature monitoring with Hi/Low alarms

Patient Information menu (name, ID no, TSB, gender)

Multiple language support

Auto or manual height adjustment

Adaptive temperature control system

Trend information for monitored parameters

Display Lamp Life Timer with warning alarm

Upper & Lower lamp selection feature

SatSeconds™ available with built-in Nellcor™ SpO2 technology




Reduction of nuisance alarms

Clinician controlled features

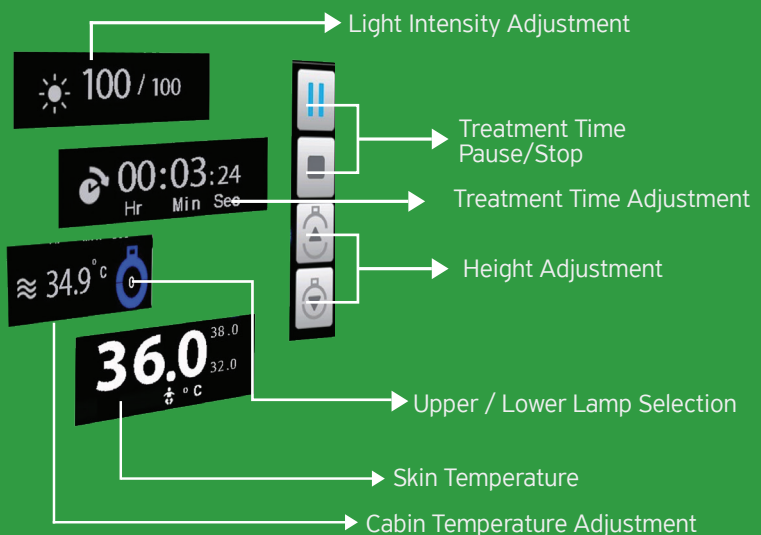
Customized alarm settings according to the needs of different patients.



BC 350

| | | |
|---|---|---|
|  | TR 203 Transport Incubator Reusable SpO2 Probe | Sensor Type: Neonate Number of Pin: 9 Pin Lenth: ~100 cm |
|  | TR 203 Transport Incubator Desposable SpO2 Probe | Sensor Type: Baby Number of Pin: 9 Pin Lenth: ~100 cm |
|  | TR 203 Transport Incubator SpO2 Probe Extension Cable | Lenth: 300 cm |

LCD Display (7" Color Touch Screen)



General Specifications

| Technical Specifications | | | |
|--------------------------------|------------------------------------|-------------------------------------|-------------------------------------|
| Bilicare Reference No. | BC 250 LED | BC 250 LCD | BC 350 |
| Number of Light Source | 16x60 Blue LED | 16x60 Blue LED | 16x60 Blue LED |
| Screen Type | LED Display | 5" Color & Touch Screen | 7" Color & Touch Screen |
| Spectral Irradiance | 0 to 100 ±5 µW/cm ² /nm | 0 to 100 ±5 µW/cm ² /nm | 0 to 100 ±5 µW/cm ² /nm |
| Spectral Irradiance Adjustment | N/A | 5 µW/cm ² /nm increments | 5 µW/cm ² /nm increments |
| Light Intensity | From 0 to 100% | From 5 to 100% | From 5 to 100% |
| Light Intensity Adjustment | 25% increments | 5% increments | 5% increments |
| Wavelength Spectrum | 450 nm to 470 nm | 450 nm to 470 nm | 450 nm to 470 nm |
| Hi/Low Skin Temperature Alarm | 30°C to 38,5°C | 30°C to 38,5°C | 30°C to 38,5°C |
| Hi/Low Air Temperature Alarm | 30°C to 38,5°C | 30°C to 38,5°C | 30°C to 38,5°C |
| Treatment Timer, Counter Type | Yes | Yes | Yes |
| Phototherapy Timer | 0 to 99 h | 0 to 99 h | 0 to 99 h |
| Treatment Timer, Adjustable | 0 to 99 h | 0 to 99 h | 0 to 99 h |
| Infrared Remote Control | Yes | N/A | N/A |
| Upper Hood Height Adjustment | Manual Control | Electrical and Adaptive | Electrical and Adaptive |
| Upper Hood Movement | 2 to 30 cm | 2 to 25 cm | 2 to 25 cm |
| Fan Speed Control | Fixed | 34+°C Auto-increment | 34+°C Auto-increment |
| Up and Down Light Selection | 360° | 180° and 360° Selectable | 180° and 360° Selectable |
| Audio and Visual Alarms | Treatment Completed | Treatment Completed | Treatment Completed |
| | Lamp Life Timer | Lamp Life Timer | Lamp Life Timer |
| | Bed not seated well | Bed not seated well | Bed not seated well |
| | Fan | Cooling Fan Activated | Cooling Fan Activated |
| | High Skin Temperature | High Air Temperature | High Air Temperature |
| | Low Skin Temperature | Low Air Temperature | Low Air Temperature |
| | High Air Temperature | N/A | N/A |
| | Low Air Temperature | N/A | N/A |
| | Overheat | Overheat | Overheat |
| | N/A | Skin Probe Disconnected | Skin Probe Disconnected |
| N/A | N/A | Yes | |
| SpO ₂ Measurement | N/A | N/A | Nellcor™ Oximax SpO ₂ |
| 360° Visual Alarm Indicator | N/A | Yes | Yes |
| Trend Record | N/A | Skin Temp & Air Temp | Skin Temp & SpO ₂ |
| Patient Info | N/A | Name. ID. TSB. Gender | Name, ID, TSB, Gender |
| GUI Languages | N/A | EN, TR | EN, TR |
| Selectable Alarm Languages | N/A | FR, ES, RU, AR | FR, ES, RU, AR |
| Approx. Life-Time of the LEDs | 20.000 hours | 50.000 hours | 50.000 hours |

Technical Specifications

SpO₂ (Available only Bilicare BC 350)

| | |
|------------------------|---|
| Technology | Nellcor OxiMax* SpO ₂ with SatSeconds™ |
| Parameters Monitored | SpO ₂ : 1% to 100% |
| Measurement Accuracy | 70% to 100% ±2 digits; ±3 digits (in motion); 69 to 0%: unspecified |
| Alarm Limit Range | SpO ₂ : 30% to 100% PR: 30 to 300 BPM |
| Display Resolution | 1 digit 11% of SpO ₂) |
| SatSeconds Alarm Limit | 10, 25, 50 or 100 SatSeconds: SatSeconds feature calculates: (SATURATION POINTS) x (SECONDS) |
| Alarm Messages | Sensor Disconnected, Sensor Connected, Sensor Off Patient, Low SpO ₂ , High SpO ₂ , Low Pulse Rate, High Pulse Rate, Pulse Timeout, Pulse Not Available |

Physical Specifications (Approximately)

| Bilicare Reference No. | BC 250 | BC 250 LCD | BC 350 |
|--|--|---|--|
| Width and Depth (W & D) | 640mm x 920 mm | 640mm x 820 mm | 640mm x 820 mm |
| Height (H), Minimum-Maximum | 1520 mm to 1770 mm | 1370 mm to 1625 mm | 1370 mm to 1625 mm |
| Hammock to Lamp Shield | 260 mm | 260 mm | 260 mm |
| Hammock Surface Area | 570 mm x 370 mm | 570 mm x 370 mm | 570 mm x 370 mm |
| Weight of Total Unit | 76 Kg | 77 Kg | 77 Kg |
| Certificates | ISO 9001:2015 EN ISO 13485:2016 CE Marking | ISO 9001:2015 EN ISO 13485:2016 CE Marking | ISO 9001:2015 EN ISO 13485:2016 CE Marking |
| Classification In accordance with EU Directive 93/42/EEC | IIb | IIb | IIb |
| GMDN Code | 35239 | 35239 | 35239 |

| | | | |
|---------------------|--|--|--|
| Standard Compliance | TS EN 60601-1 TS EN 60601-1-2 TS EN 60601-1-6 TSE N 60601-1-8 TS EN IEC 60601-2-50 TS EN 62366-1 TS EN ISO 80601-2-56 TS EN ISO 14971 | | |
|---------------------|--|--|--|

| Operating Conditions | | Storage/Transportation Conditions | |
|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Ambient Temperature | 18° C to 38° C | Ambient Temperature | -25° C to 60° C |
| Humidity | 10% to 95% RH non-condensing | Humidity | 0% to 95% RH non-condensing |
| Ambient Pressure | 1100 hPa to 700 hPa | Ambient Pressure | 1100 hPa to 500 hPa |
| Electrical Input | 100-240 VAC, 50/60 Hz, 0.2 to 1 Amp. | 100-240 VAC, 50/60 Hz, 0.2 to 1 Amp. | 100-240 VAC, 50/60 Hz, 0.2 to 1 Amp. |
| Earth Leakage Current | <300 µA | <300 µA | <300 µA |

OKM 200 Transcutaneous Bilirubinometer

| | |
|--------------------|--|
| Display Range | No less than 25.0 mg/dL (425 $\mu\text{mol/L}$) |
| Accuracy | ± 1.5 mg/dL (± 25.5 $\mu\text{mol/L}$) |
| Repeatability | No more than 3% |
| Information Prompt | Low voltage prompt |
| Inspection Screen | Displayed when white screen is detected: 0.0-1.5 Displayed when yellow screen is detected: 20.0 \pm 1.5 |

Other Parameters

Rated voltage and frequency of the device when it is supplied by the supply main: 220V-230V/ 50Hz
Input power of the device when it is supplied by the supply main: 30 VA
Power supply type of the host when it is supplied by the internal power: Rated voltage 7.4V ===




Base output..... 8.4V === 1A

Light Source..... Xenon flash lamp

STANDARD ACCESSORIES

- 1 pc. Skin Temperature Probe
- 1 pc. Eye protection mask bonnet type
- 1 pc. Power Cord
- 1 pc. User Manual
- 1 pc. Hammock, only for BC 250, BC 250 LCD, BC 350
- 1 pc. Nellcor SpO₂ Extension Cable for BC 350
- 2 pcs. Nellcor SpO₂ Probe, Neonatal, Single Patient Use for BC 350



| | | |
|---|-----------------------------------|--|
|  | Disposable Skin Temperature Probe | 2 pin, 120 cm, 20 k Ω |
|  | Skin Temperature Probe Stamp | - |
|  | Reusable Skin Temperature Probe | 1,6 metre, 4 pin, internal resistance: 30 k Ω |

| Optional Phototherapy Accessories | | |
|---|--|-----------------------------------|
| Product Image | Product Name | Technical Specifications |
|  | Newborn Bone Type Phototherapy Eye Mask Small | Head circumference: 20-28 cm |
|  | Newborn Bone Type Phototherapy Eye Mask Medium | Head circumference: 24-33 cm |
|  | Newborn Bone Type Phototherapy Eye Mask Large | Head circumference: 30-38 cm |
|  | Phototherapy Protected Diaper - Small | For babies weighing 750g-1250g |
|  | Phototherapy Protected Diaper - Medium | For babies weighing 1250g - 2250g |
|  | Phototherapy Eye Mask Y Type Small | - |
|  | Phototherapy Eye Mask Y Type Medium | - |
|  | Phototherapy Eye Mask Y Type Large | - |

| Fototerapi Aksesuarları | | |
|---|--|---------------------|
| Ürün Görseli | Ürün Adı | Teknik Özellikler |
|  | Phototherapy Eye Mask Bonnet Type Small | - |
|  | Phototherapy Eye Mask Bonnet Type Medium | - |
|  | Phototherapy Eye Mask Bonnet Type Large | - |
|  | Baby Gloves | - |
|  | Hammock for BC100/250/350 | Size: 63 cm x 46 cm |
|  | Hammock for BC100/250/350 without Logo | Size: 63 cm x 46 cm |
|  | Dust Cover | |

OKUMAN

OKUMAN Medikal Sistemler A.Ş.
Kazım Karabekir Caddesi 95/95 06060 Iskitler
Ankara / Turkey

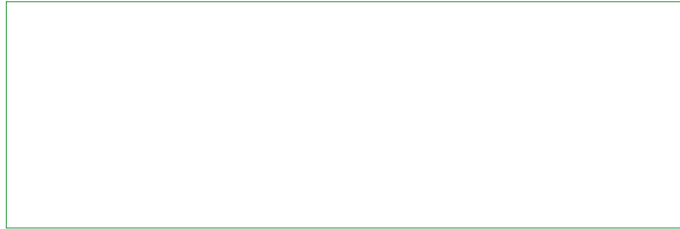
info@okuman.com.tr
www.okuman.com.tr

Phone: +90 312 384 05 20
Fax : +90 312 384 19 75

© 2023 **OKUMAN** Medikal Sistemler A.Ş.
All rights reserved. Technical specifications are subject to
change by **OKUMAN** Medikal Sistemler A.Ş. without prior notice.

CE

1984



Catalog ID: OKM-BLC-008-082022-EN