



ST-30H

Non-invasive Ventilators



ST-30H

Technical Data

1 Parameters

1.1 Performance parameters

| Parameter | Scope | Accuracy |
|-----------------------|--|---------------------------------|
| IPAP | 4 cm H ₂ O-30 cm H ₂ O (no lower than EPAP and max inspiratory pressure) | ±2 cmH ₂ O |
| Max.IPAP | 4 cm H ₂ O-30 cm H ₂ O (no lower than inspiratory pressure) | ±2 cmH ₂ O |
| EPAP | CPAP mode: 4 cmH ₂ O-20 cmH ₂ O Other modes: 4 cmH ₂ O-25 cmH ₂ O | ±2 cmH ₂ O |
| Ramp time | 0 min ~ 60 min | ±10% of the set value |
| Ramp pressure | 4 cmH ₂ O-20 cmH ₂ O (no higher than respiratory pressure) | |
| Tidal volume | 20 ml ~ 2500 ml | ±(20 + 20% of set value) (ATPD) |
| Backup Ti | 0.2 s ~ 4.0 s | ±(0.1 of set value + 10%) s |
| Pressure rising grade | Grade 1-6 | |
| Backup BPM | 1 BPM ~ 60 BPM | ± (1 BPM + 10% of set value) |
| Inspiratory impedance | 1 cmH ₂ O @30 L/Min; 6 cmH ₂ O @60 L/Min | |
| Expiratory impedance | 1 cmH ₂ O @30 L/Min; 6 cmH ₂ O @60 L/Min | |
| Max ultimate pressure | 30 cmH ₂ O | ±1 cmH ₂ O |
| Alarm volume | 60 dB ~ 70 dB | ±5 dB |
| Oxygen concentration | 21-100% (for ST-30K, ST-30H only) | ±8% |

1.2 Ambient parameters

| Parameter | Working conditions | Storing conditions |
|---|--|-------------------------|
| Temperature | 10°C ~ 30°C | - 40°C ~ 55°C |
| Relative humidity | 15-93% (non-condensing) | 15-93% (non-condensing) |
| Air pressure | 83-102kPa (5,600 feet above the sea level) | _____ |
| High-pressure oxygen inlet pressure range | 300kPa~600kPa (43.5psi~87.02psi) | _____ |

1.3 Physical and electrical parameters

| Parameter | Value |
|--------------------|--------------------------------|
| Overall dimensions | 24.3 cm Lx 16.7 cm W x 13 cm H |
| Weight | 2.9 kg |
| Input: | 100-240V, 50-60Hz, 2A MAX |

1.4 Electric safety classification

| Parameter | Value |
|---|---|
| Electric shock prevention level | Type II |
| Electric shock protection level | BF type application component |
| Waterproofing level | IPX 0 |
| Operation mode | Continuous operation |
| Safety when used in the presence of combustible anesthetizing gas mixed with air or with He2O | Cannot be used in the presence of combustible anesthetizing gas mixed with air or with He2O |

1.5 Radio frequency (RF) parameters

| Parameter | Value |
|-----------------------|------------------------------------|
| Radio criteria | 802.11 b/g/n |
| Frequency range | 2.412 GHz — 2.484 GHz |
| Transmitting power | 802.11b: +16 +/-2dBm (@11Mbps) |
| | 802.11g: +14 +/-2dBm (@54Mbps) |
| | 802.11n: +13 +/-2dBm (@HT20, MCS7) |
| Receiving sensitivity | 802.11b: -93dBm (@11Mbps, CCK) |
| | 802.11g: -85dBm (@54Mbps, OFDM) |
| | 802.11n: -82dBm (@HT20, MCS7) |

1.6 Battery specifications

| No. | Item | Specifications | Remark |
|-----|-----------------------------------|---|--|
| 1 | Nominal | 13000mAh | 0.2C5A discharge (standard) |
| 2 | Nominal voltage | 22.2V | 3.7*6 |
| 3 | Final discharging voltage | 20.00 - 22.00V | |
| 4 | Way of charging | Constant current/voltage | DC- DC |
| 5 | Charging current (standard) | 1,500mA (constant current) | 0 ~ 40°C |
| 6 | Charging voltage (standard) | 25.2±0.1V | 4.2*6 |
| 7 | Max. continuous charge current | 1500mA (0.5C5A) | Current limited to 1.5A already |
| 8 | Max. continuous discharge current | 5000mA | - 20 ~ 60°C |
| 9 | Max. continuous discharge current | 2500mA (0.2C5A) | Under -40-60°C, 0.2C5A discharge, the discharge is no lower than nominal |
| 10 | Storing temperature | Short-term (within 1 month): - 20 ~ 60°C | |
| | | Mid-term (within 3 months): - 20 ~ 45°C | |
| | | Long-term (within 1 year): - 20 ~ 20°C | |
| 11 | Electric charge upon delivery | Charge being 30% or so | |