

ILIVE Ventilator

Advanced ICU Ventilation for Critical Care

ILIVE is Pakistan's first DRAP-approved ICU ventilator fully designed and manufactured in Pakistan. Developed for reliable respiratory support in critical care environments, ILIVE has been tested on actual patients, endorsed by medical practitioners, and deployed in several hospitals. It combines advanced ventilation control, real-time waveform monitoring, patient-ventilator synchronization, alarm management, and battery backup support to help clinicians deliver safe and controlled ventilation with confidence.



PATIENT SAFETY AT CORE

Multi-layered safety system with real-time monitoring and alarms.



ADVANCED VENTILATION

Comprehensive ventilation modes with patient-ventilator synchrony.



INTUITIVE INTERFACE

15.6-inch Full HD touchscreen for easy and efficient clinical operation.



BUILT FOR RELIABILITY

4-hour battery backup and robust performance for critical care.

PRODUCT HIGHLIGHTS

- ✓ Pakistan's first DRAP-approved ICU ventilator fully designed and manufactured in Pakistan
- ✓ Endorsed by PEC and medical practitioners
- ✓ Currently deployed in several hospitals, saving critical lives
- ✓ Developed with a comprehensive set of ventilation modes for ICU applications
- ✓ Flow pattern control for customized inspiratory flow delivery
- ✓ Designed with a strong focus on patient safety, usability, and reliable operation
- ✓ Easy-to-use operation through a responsive multi-touch touchscreen interface
- ✓ Sensitive and responsive patient-ventilator synchronisation
- ✓ Tested for safety and reliability under extreme hardware failure scenarios
- ✓ Supported by local technical expertise, service, and maintenance availability
- ✓ Built to offer a cost-effective and locally maintainable ventilation solution for Pakistani healthcare facilities

VENTILATION MODES



MONITORING PARAMETERS

Airway Pressure Monitoring:

- Peak Pressure
- Plateau Pressure
- Mean Airway Pressure
- PEEP
- Occlusion Pressure

Volume & Flow Monitoring:

- Exhaled Tidal Volume
- Maximum Tidal Volume
- Minute Volume
- Leakage Volume
- Inspiratory Flow
- Expiratory Flow

Respiratory Mechanics:

- Static Compliance
- Dynamic Compliance
- Inspiratory Resistance
- Expiratory Resistance
- Expiratory Time Constant (RC_{exp})
- Work of Breathing

Breathing Pattern & Patient Effort:

- Total Breath Rate
- Spontaneous Breathing Percentage

Oxygen & System Status:

- FiO₂
- Battery Level
- Error Code / System Status

ALARM SYSTEM

- 🔔 Airway Pressure High / Low
- 🔔 Tidal Volume High / Low
- 🔔 Breath Rate High / Low
- 🔔 PEEP High / Low
- 🔔 FiO₂ High / Low
- 🔔 Minute Volume High / Low
- 🔔 Main Failure
- 🔔 Battery Alarm
- 🔔 Hardware Failure
- 🔔 Breathing Circuit Disconnection
- 🔔 Gas Supply Disconnection
- 🔔 Apnea Alarm
- 🔔 Occlusion Alarm

MONITORING ACCURACY

Airway Pressure	±(2.0 cmH ₂ O + 4% of actual reading)
Tidal Volume	±15 mL or ±8% of reading, whichever is greater
Minute Volume	±0.3 L/min or ±8% of reading, whichever is greater
Inspired Oxygen / FiO ₂	±3% over 21–100% range

CLINICAL APPLICATIONS

- 🏥 ICU / CCU
- 🚑 Emergency / Trauma
- 👤 Post-Operative Care
- 🫁 Adult Critical Care
- 🏢 Hospital Respiratory Support

TECHNICAL SPECIFICATIONS

Specification	Value
Device Type	ICU Ventilator
Patient Type	Pediatric and Adult
Ventilation Modes	PC-CMV, VC-CMV, PC-AC, VC-AC, PC-SIMV, VC-SIMV, Spont./CPAP with Apnea Ventilation
Breath Rate	5–35 bpm
Tidal Volume Range	100–2000 mL
I:E Ratio	1:7 to 4:1
Inspiratory Pressure Range	5–60 cmH ₂ O
Pressure Support Range	0–40 cmH ₂ O
Maximum Inspiratory Flow	100 L/min
PEEP Range	0–20 cmH ₂ O
FiO ₂ Range	21–100%
Inspiratory Rise Time	0–500 ms
Apnea Time	5–60 sec
Trigger Sensitivity	0.5–20 L/min, step size 0.5 L/min
Patient Breath Trigger	Pressure
Cycling	Time, Volume, Pressure, Flow
Flow Pattern Control	Square, Decelerating
Expiratory Trigger	Volume, Pressure, Time, Flow
Display	15.6-inch Full HD capacitive touchscreen
Power Input	220 V AC, 50 Hz
Battery Backup	Up to 4 hours
Physical Dimensions	1300 mm × 550 mm × 550 mm
Weight	60 kg

CREDENTIALS & APPROVALS



DRAP
Approved



PEC
Endorsed



Tested on Actual Patients /
Endorsed by Medical Practitioners



Deployed in
Several Hospitals

STANDARDS REFERRED

PEC-ATP-EM-PMVS 001:2020 | IEC 61508 | IEC 62304 | IEC 60601-1-8 / ISO 80601 | ISO 14971 | ISO 13485

