

## ● Company Overview

### 1. What is Keetronics?

Keetronics (India) Pvt. Ltd. is a leading manufacturer of Human-Machine Interface (HMI) solutions, rugged keyboards, display systems, touch interfaces, and embedded electronics for industrial and mission-critical applications.

### 2. How long has Keetronics been in business?

Keetronics has over 32 years of experience in designing, developing, and manufacturing advanced HMI products and rugged electronic solutions.

### 3. Where is Keetronics located?

Keetronics is headquartered in Pune, Maharashtra, India, serving customers across India and international markets.

### 4. Which industries does Keetronics serve?

Keetronics serves a wide range of industries, including:

- Defence and Aerospace
- Rail Transportation
- Medical Equipment
- Industrial Automation
- Avionics
- Marine Systems
- Telecommunications
- Embedded Computing
- Healthcare Devices
- Computer Peripherals

### 5. Does Keetronics export internationally?

Yes. Keetronics supports global customers with custom-designed HMI products and rugged display solutions tailored to international standards and application requirements.

---

## ● Products & Solutions

### 6. What products does Keetronics manufacture?

Keetronics manufactures:

- Membrane Keyboards
- Capacitive Keyboards
- Silicone Rubber Keypads
- Braille Keyboards
- Backlit Keyboards
- Vandal-Proof Keyboards
- Long Travel Keyboards
- Short Travel Keyboards
- Optical Bonded Displays
- Rugged Display Systems
- Touch Panels
- Graphic Overlays
- Embedded HMI Solutions
- MIL-Grade Input Devices

### 7. Does Keetronics offer customized solutions?

Yes. Every product can be customized according to application requirements, including:

- Layout and key design
- Interface protocols
- Backlighting
- Environmental sealing
- Mounting methods
- Materials and finishes
- Display integration
- Branding and labeling

### 8. Can Keetronics support OEM and private-label manufacturing?

Yes. Keetronics supports OEM, ODM, and private-label manufacturing programs for global customers.

### 9. What display sizes are available?

Keetronics offers rugged display solutions ranging from 3-inch compact displays to 27-inch industrial-grade monitors.

### 10. Does Keetronics provide touchscreen integration?

Yes. Resistive, capacitive, and custom touch technologies can be integrated into display solutions based on application requirements.

### 11. What is a rugged display?

A rugged display is engineered to operate reliably in harsh environments involving vibration, shock, dust, moisture, extreme temperatures, and outdoor conditions.

### 12. What is optical bonding?

Optical bonding is a process that eliminates the air gap between the display and cover glass, improving visibility, durability, touch performance, and environmental resistance.

### 13. What optical bonding technologies does Keetronics provide?

Keetronics offers both OCA (Optically Clear Adhesive) and OCR (Optically Clear Resin) optical bonding solutions.

### 14. What are the advantages of optical bonding?

Benefits include:

- Improved sunlight readability
- Reduced reflections
- Better contrast ratio
- Enhanced touch accuracy
- Increased impact resistance
- Prevention of internal condensation

### 15. Does Keetronics offer accessibility solutions?

Yes. Keetronics develops Braille keyboards and specialized accessibility-focused input devices for visually impaired users.

---

## ● Keyboard Technologies

### 16. What keyboard technologies are available?

Keetronics offers:

- Membrane Technology
- Capacitive Switching Technology
- Silicone Rubber Technology
- Mechanical Key Technology
- Hybrid Keyboard Designs

### 17. What is a capacitive keyboard?

A capacitive keyboard uses electronic sensing technology instead of mechanical contacts, providing high reliability, long life, and excellent environmental resistance.

### 18. What is a membrane keyboard?

A membrane keyboard uses flexible printed circuits and pressure-activated switches, making it lightweight, compact, and highly customizable.

### 19. What are backlit keyboards?

Backlit keyboards contain integrated illumination systems for operation in low-light and night-time environments.

### 20. Can keyboards be customized for night vision applications?

Yes. Keetronics designs NVIS-compatible keyboards for defence and aerospace applications.

### 21. Are multilingual keyboards supported?

Yes. Keyboards can be manufactured with custom legends, languages, symbols, and regional layouts.

### 22. Can Keetronics develop sealed keyboards?

Yes. Fully sealed keyboards can be designed to meet high IP protection requirements for harsh environments.

## • Keyboard Technologies

### 23. Does Keetronics provide design support?

Yes. Keetronics assists customers throughout the design lifecycle, from concept development to production.

### 24. Can Keetronics help with prototype development?

Yes. Engineering teams support rapid prototyping, design validation, and pre-production testing.

### 25. Does Keetronics provide electronics design services?

Yes. Embedded electronics, PCB design, firmware integration, and interface development are available.

### 26. Can mechanical design be included?

Yes. Keetronics offers complete mechanical design support including housings, enclosures, mounting systems, and industrial design.

### 27. Does Keetronics provide UI/UX support?

Yes. Human-machine interface design, graphic overlays, labeling, and usability optimization services are available.

---

## • Technical Specifications

### 28. Which communication interfaces are supported?

Supported interfaces include:

- RS-232
- RS-422
- RS-485
- I<sup>2</sup>C
- SPI
- TTL
- USB
- Ethernet (project dependent)

### 29. What environmental protection ratings are available?

Depending on product design:

- IP54
- IP65
- IP67
- Ip68

### 30. Are products suitable for outdoor environments?

Yes. Products can be designed for outdoor operation with sunlight readability, weather protection, UV resistance, and environmental sealing.

### 31. Can products operate in extreme temperatures?

Yes. Products can be engineered for demanding temperature ranges including defence, aerospace, and outdoor applications.

### 32. Does Keetronics support EMI/EMC requirements?

Yes. Products can be designed with shielding and filtering solutions to meet EMI/EMC compliance requirements.

### 33. Are MIL standards supported?

Yes. Products can be developed to support various military and defence specifications based on customer requirements.

---

## ● Manufacturing & Quality

### 34. What manufacturing capabilities does Keetronics have?

Capabilities include:

- Precision Assembly
- Optical Bonding
- Membrane Switch Manufacturing
- Silicone Keypad Production
- Display Integration
- Electronics Assembly
- Prototype Manufacturing
- Volume Production

### 35. Does Keetronics operate cleanroom facilities?

Yes. A Class 100 cleanroom facility is used for optical bonding and precision manufacturing processes.

### 36. Are products tested before shipment?

Yes. Products undergo functional, environmental, reliability, and quality inspections before dispatch.

### 37. Can Keetronics support low-volume production?

Yes. Both low-volume and high-volume manufacturing programs are supported.

### 38. What quality standards are followed?

Manufacturing and quality processes are aligned with international industry standards and customer-specific requirements.

### 39. Can Keetronics support long product life cycles?

Yes. The company regularly supports long-term industrial, defence, transportation, and medical programs requiring extended product availability.

## ● Certifications & Compliance

### 40. Which standards and certifications are supported?

Depending on project requirements:

- RoHS Compliance
- REACH Compliance
- UL Requirements
- IP Testing Standards
- EMI/EMC Standards
- Defence and Military Standards

### 41. Can documentation and compliance reports be provided?

Yes. Relevant test reports, compliance documentation, and project-specific quality records can be provided as required.

---

## ● Project Support

### 42. Does Keetronics offer end-to-end project execution?

Yes. Keetronics provides complete solutions from concept to production.

Services include:

- Requirement Analysis
- Industrial Design
- Mechanical Design
- Electronics Development
- HMI Design
- Prototyping
- Testing
- Manufacturing
- Product Support

### 43. How early should customers engage with Keetronics?

Customers are encouraged to involve Keetronics during the concept and design phase to optimize performance, manufacturability, and cost.

### 44. Can Keetronics collaborate with international engineering teams?

Yes. The company routinely works with customers, consultants, OEMs, and system integrators worldwide.

### 45. Does Keetronics provide technical consultation?

Yes. Application engineering teams assist with product selection, technology evaluation, and solution development.

---

## ● Ordering & Contact

### 46. How can I request a quotation?

Customers can submit project details, drawings, specifications, or requirements through the contact channels available on the company website.

#### **47. What information should be provided for a custom solution?**

Typical requirements include:

- Application details
- Product dimensions
- Interface requirements
- Environmental conditions
- Quantity requirements
- Compliance standards
- Performance expectations

#### **48. How long does prototype development take?**

Prototype timelines vary based on complexity, customization level, and testing requirements.

#### **49. Does Keetronics provide after-sales support?**

Yes. Technical assistance and product support are available throughout the product lifecycle.

#### **50. How can I contact Keetronics?**

Website: [www.keetronics.com](http://www.keetronics.com)

Email: [enquiry@keetronics.com](mailto:enquiry@keetronics.com)

Phone: +91 96898 95658