

# Intelligent Cooling Smart Features in Today's Refrigerators



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In today's world, a refrigerator is more than just a household necessity—it's a hub of innovation. Like other cutting-edge electronics, modern fridges in Bangladesh are now equipped with some smart features that elevate comfort, convenience, and energy efficiency to new heights. Thanks to AI (Artificial Intelligence) and IT (Information Technology) advancements, these smart fridges are designed to serve you seamlessly for years to come.

Join us as we explore how to make the perfect fridge purchase this Eid and beyond and discover the world of smart fridges and the remarkable features they offer to transform your kitchen experience.

One of the latest smart features incorporated into refrigerators called the intelligent Inverter Technology has been adopted by all renowned electronic companies such as Gree, Jamuna, Minister Hi-Tech, Transcom, Walton, and more.

This technology employs a sophisticated process to regulate the refrigerator's speed, ensuring optimal energy efficiency and precise temperature control. By adjusting the compressor speed in response to cooling demands, this technology maintains a constant temperature, reduces energy consumption, and operates more quietly.

Smart features enable users to further minimize energy use by tailoring consumption to their needs, resulting in significant energy savings and longer-lasting freshness for stored food.

Moreover, refrigerator manufacturers have incorporated the environmentally friendly R-600 refrigerant gas in their products, showcasing their commitment to eco-friendliness. This gas boasts zero Ozone Depletion Potential and reduced toxicity, particularly in compressors. This particular eco-friendly attribute underscores the industry's dedication to sustainable practices.

## GREE

### ACTIVE CARBON DEODORIZER

Different foods stored in the fridge have different smells and flavors.

The Active Carbon Deodorizer feature prevents different food odors from blending. It diffuses bacteria that cause smells to mix, keeping food fresh and odor-free for longer.

### GARDEN FRESH TECHNOLOGY (VITAMIN FRESH FEATURE)

This feature integrated into the refrigerators keeps vegetables fresh for up to 15-16 days. Typically, veggies wilt within 2-3 days after being placed in the fridge, but Garden Fresh Technology maintains their freshness, ensuring they stay green and crisp. This particular feature is also considered a 'green feature' in refrigerators.

### HUMIDITY CONTROLLER MODE

According to Md. Julhak Hossain, National Sales Manager at Electromart Ltd., Gree's refrigerators include a Humidity Controller Mode in the vegetable box. Unlike many other fridges, this feature allows you to adjust the humidity, keeping veggies at the optimal temperature and extending their freshness.

### DOOR ALARM

The Door Alarm feature ensures the fridge is properly closed. If the door is left ajar, the alarm will sound, alerting you to close it and preventing the loss of cool air and potential spoilage of food.

### JAMUNA

### SMART MUSIC SYSTEM INSIDE (BUILT-IN SPEAKERS)

"Our refrigerators come with a built-in music system that allows you to

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enjoy your favorite tunes directly from the fridge. Music can be easily played through Bluetooth, enabling a seamless connection with your smartphone or other Bluetooth-enabled devices," said Salim Ullah Salim, Director of Marketing at Jamuna Electronics and Automobiles Ltd.

### TOUCH SCREEN CONTROL

Jamuna refrigerators feature touchscreen controls that allow you to easily adjust the temperature settings with a simple touch. This user-friendly interface provides precise control over the cooling environment, ensuring your food stays at the optimal temperature.

### APPS CONTROL

The Tuya Smart app, available on the Google Play Store, allows you to control your refrigerator remotely using your Android mobile device. With the help of this app, you can adjust settings, monitor performance, and receive notifications for optimal convenience and efficiency.

### MINISTER HI-TECH

#### BUILT-IN STABILIZER

According to K M G Kibria, Head of Brand and Communication at Minister - Myone Group, Minister is the company that introduced built-in stabilizers inside refrigerators, which is a key smart feature. Previously, users would have to buy stabilizers separately for their fridges, resulting in more hassle.

#### NANO HEALTH CARE TECHNOLOGY

The Nano Healthcare technology keeps food fresh and nutrient-rich. Every smart fridge currently usually has a NANO Healthcare sticker on it.

"Minister has plans to specifically integrate the Voice Control Mode and smartphone app functionality into future fridge models and is working on them at present, to enhance user experience and become smarter in terms of technology," said K M G Kibria, Head of Brand and Communication at Minister - Myone Group.

### TRANSCOM

#### ECO MONITORING SENSOR

This sensor in the fridge detects whether someone is near the refrigerator and automatically activates or deactivates the energy-saving mode accordingly.

#### INVERTER X DUAL FAN TECHNOLOGY

Separate cooling fans for both fridge and freezer parts cool separately as per the requirement of each compartment, ensuring energy saving and powerful cooling. The inverter can operate the compressor as per the required cooling demand.

### FROST-RECYCLE COOLING SYSTEM

"The Frost-Recycle Cooling System operates when the compressor is in sleep mode, recycling the chilled air produced from the evaporator's frost and distributing it to all compartments. This process not only maintains a consistent cooling effect but also contributes to energy savings," said Saikat Azad, Category Head at Transcom Electronics Ltd.

### OTHERS

All components in the Transcom refrigerators are fully free from chlorofluorocarbons (CFCs) and hydrofluorocarbons (HFCs), ensuring a sustainable and eco-conscious choice for consumers.

### WALTON

#### METAL & DUO COOLING

Metal Cooling ensures balanced cooling among food preserved in the refrigerator while efficiently retaining the temperature inside the refrigerator. The Duo Cooling+ technology is an innovative way to resist the blending of smells between cabinets by using independent cooling circuits for each cabinet.

#### E. SAVE MODE

The E Save mode allows for maintaining the required temperature for the safe preservation of foods while saving a significant amount of energy in Walton refrigerators.

#### TURBOCOOL MODE

"We conducted extensive research on the requirements of our customers and their usage patterns, and the TURBOCOOL Mode is one of the outcomes of that. This mode accelerates the cooling speed of the refrigerator and allows it to achieve the set temperature in a very short time," said Tahasinul Haq, Chief Business Officer at Walton Refrigerator.

#### DIGITAL DISPLAY

Walton's Digital Display feature enhances user experience by allowing them to see and set the precise temperature level they desire with only a mild touch. It also consists of features like a child lock and a smart alarm system that activates when the door is kept open for too long. The child lock in it can be activated or deactivated by pressing it for 3 seconds.

#### WIFI CONNECTIVITY

The innovative feature is a combination of enhancement of user experience and safe operation of the appliance. It allows the user to monitor, adjust, and control the refrigerator through an app even if they are miles away from home.

### OTHERS

In some of Walton's flagship models, multiple modes and features have been implemented, going up to several as 8 - for the users' convenience. To name a couple of them - the Ultra Fresh Mode allows users to convert the frozen food compartment to a refrigerator cabinet, while the Holiday or Vacation Mode allows users to take a vacation away from home, turning the refrigerator part off while the frozen food compartment remains operational.

When purchasing a refrigerator for your home, it's important to consider several factors to ensure long-lasting satisfaction and a smooth buying process. Consider the fridge's size, capacity, style, energy efficiency, and warranty besides looking into smart features. It's also wise to invest in a high-quality refrigerator, even if it means spending more initially, to avoid the hassle of frequent replacements.

