# **Panasonic Products: Complete Guide and Search Reference**

### **Dataset Overview**

The Panasonic product dataset contains 168 products across 9 different categories. Each product has the following attributes:

- Product ID: Unique identifier for each product
- Category: Product classification (e.g., Televisions, Audio, Refrigerators)
- Title: Detailed product name with key specifications
- Price: Cost in Indian Rupees (₹)
- Image URL: Link to product image
- Key Features: Comma-separated list of product highlights
- Specifications: JSON format (currently empty for most products)
- Product URL: Link to product page

## **Product Categories Distribution**

The dataset includes 9 product categories with the following distribution:

- AC: 38 products (22.6% of catalog)
- **Cameras**: 33 products (19.6% of catalog)
- **Refrigerators**: 20 products (11.9% of catalog)
- **Small Appliances**: 17 products (10.1% of catalog)
- **Televisions**: 16 products (9.5% of catalog)
- Washing Machines: 16 products (9.5% of catalog)
- Accessories: 12 products (7.1% of catalog)

- **Audio**: 8 products (4.8% of catalog)
- **Microwave Ovens**: 8 products (4.8% of catalog)

## **Additional Product Lines and Categories**

In addition to the 9 main product categories in the dataset, Panasonic offers a wider range of products that may be relevant for a comprehensive understanding:

## **Camera Line Details (LUMIX Series)**

The Cameras category in the dataset (33 products) consists of LUMIX cameras, which can be further classified into:

- 1. **LUMIX S Series** Full-Frame Mirrorless
  - Professional-grade models with L-mount lens compatibility
  - Models like S1, S5II, S9 with different resolutions and features
- 2. **LUMIX G Series** Micro Four Thirds
  - Smaller sensor cameras with excellent portability
  - Includes photography-focused G9/G9II and video-centric GH5/GH6/GH7
- 3. **LUMIX FZ Series** Bridge Cameras
  - Fixed-lens cameras with powerful zoom capabilities
  - All-in-one solutions with various zoom ranges

### 4. LUMIX Compact Cameras

- Premium compact models (LX series)
- Travel zoom models (TZ series)

### **Additional Business and Consumer Categories**

Panasonic also manufactures products in these categories (not in the current dataset):

#### 1. Personal Care

- Shavers and trimmers
- Hair care appliances
- Oral care products

#### 2. Professional Equipment

- Broadcasting and professional video
- Security systems
- Professional displays

#### 3. Home Entertainment

- Blu-ray and DVD players
- Home theater systems
- Gaming speakers

#### 4. Energy Solutions

- Solar panels
- Energy storage systems
- Power management solutions

#### 5. Automotive Products

- In-vehicle entertainment
- Navigation systems
- Advanced driving assistance systems

## **Price Ranges by Category**

Understanding price ranges helps in filtering products by budget:

Category	Min Price (₹)	Max Price (₹)	Average Price (₹)	Product Count
Cameras	17,247	249,156	124,793	33
Televisions	15,990	239,990	72,928	16
AC	30,990	67,990	44,740	38
Refrigerators	27,990	71,990	39,991	20
Washing Machines	8,990	32,990	18,284	16
Audio	8,066	32,990	16,492	8
Microwave Ovens	5,890	17,790	11,160	8
Small Appliances	1,090	12,750	5,726	17
Accessories	153	1,600	708	12

# **Detailed Category Attribute Tables**

1. Air Conditioners (38 Products)

Attribute	Value Range	Hot Keywords for Search
	0.9 Ton (100-120 sq ft) < br > 1.0 Ton (100-140 sq ft)	room size, small room AC, medium room
Compaits	>1.4 Ton (140-180 sq ft) >1.5 Ton (150-190	AC, large room AC, apartment cooling,
Capacity	sq ft) 2.0 Ton (180-240 sq ft) 2.2 Ton (220-	bedroom AC, living room AC, hall AC, sq
	280 sq ft)	ft coverage, hall cooling
		energy efficient, power saving, low
Energy	3 Star (60.5%) < br>4 Star (13.2%) < br>5 Star	electricity bill, eco mode, low running
Rating	(26.3%)	cost, economical, power consumption,
		energy saver
		wall mounted, split unit, hot & cold, all
Туре	Split AC, Smart Split AC, Hot & Cold	season, cooling heating, dual function,
		year round comfort
		rust-proof, durable condenser, long-
Condenser	Copper	lasting, coastal area AC, humid climate,
		high durability
Special	7-in-1 Convertible True Al Mode Wi-Fi	convertible AC, variable cooling, power
Features	Connectivity < br > PM 0.1 Filter	adjustment, cooling modes,
reatures	Connectivity Shirt W. 6.1 Filter	customizable cooling, intelligent cooling
		uniform cooling, even temperature,
Swing Type	2-Way Swing, 4-Way Swing	corner to corner, whole room cooling,
		wide angle airflow
		smart home, remote operation, phone
Smart	Miraie App Control < br > Voice Assistant	controlled, work from home, voice
Features	Compatibility Matter Certified (select models)	command, hands-free control, Google
		Assistant, Alexa, IoT
Air	PM 0.1 Filter < br > Ag Clean Plus Air Purification	clean air, anti-dust, anti-bacterial, air
Purification	Filter	purifying, allergy protection, asthma

Attribute	Value Range	Hot Keywords for Search	
		friendly, pollution control, dust removal	
Price Range	Range ₹30,990 - ₹67,990 budget AC, affordable cooling, predictive, budget AC, affordable cooling, cost-effective, budget AC		
Model Year	2024, 2025	latest model, new technology, current generation, advanced features, newest version	
Refrigerant	R32 (Environment Friendly)	eco-friendly, green refrigerant, zero ODP, ozone safe, environmentally conscious	
Color	White	classic color, neutral design, matches decor, elegant look	

# 2. Televisions (16 Products)

Attribute	Value Range	Hot Keywords for Search
Size	32 inches (12.5%) < br>43 inches (31.3%) < br>55 inches (31.3%) < br>65 inches (18.7%) < br>75 inches (6.2%)	small TV, medium TV, large TV, wall-sized, compact TV, apartment TV, bedroom TV, living room TV, theater-like, immersive viewing
Resolution	Full HD (1080p) 4K Ultra HD	crisp display, sharp image, movie quality, cinema experience, crystal clear, HD movies, Ultra HD streaming, 4K content, lifelike clarity
Display Technology	4K Studio Color Engine br>4K Color Engine br>Hexa Chroma Drive	vibrant colors, true colors, bright display, deep blacks, color accuracy, film mode, cinema mode, rich colors, realistic skin tones
HDR Support	HDR 10, HDR 10+	high dynamic range, contrast enhancement, bright highlights, shadow detail, realistic lighting, expanded color
Smart Platform	Google TV < br > Smart TV	streaming TV, Netflix TV, Amazon Prime TV, YouTube ready, internet TV, web browsing TV, screen mirroring, cast from phone
Audio Technology	Dolby Digital < br > Audio Booster+	rich sound, theater sound, deep bass, clear dialogue, surround sound experience, loud volume, distortion-free audio, concert-like sound
Smart Features	Google Voice Assistant < br > Chromecast Built- in	voice search, hands-free control, search by speaking, content casting, phone to TV, wireless display, screen sharing
Design	Slim Bezel, Bezel-less	edge-to-edge display, borderless design, frameless look, modern design, sleek

Attribute	alue Range Hot Keywords for Search		
		appearance, contemporary style	
Connectivity	multiple devices, gaming console, sour connection, wireless headphones, ext storage, media playback		
Color	Black classic design, elegant appearance, mat decor, stylish look		
Price Range	budget TV, affordable entertainment, premium viewing, luxury display, value-formoney, family entertainment, home theat setup		
Model Series	ries  MX Series (MX660DX, MX740DX) < br> MS Series (MS550DX, MS660DX)  premium series, mid-range series, feature rich model, entry-level series		

# 3. Refrigerators (20 Products)

Attribute	Value Range	Hot Keywords for Search
	260L (5.0%) 280L (20.0%) 309L	small fridge, compact refrigerator, family size,
Capacity	(35.0%) 338L (20.0%) 400L	large capacity, spacious fridge, bachelor
	(10.0%) 450L (10.0%)	fridge, family refrigerator, multi-door
		low power consumption, electricity saver,
Energy Rating	2 Star (40.0%) < br > 3 Star (60.0%)	economical operation, power efficient, eco
Life gy rating	2 Star (40.076) (817 3 Star (00.076)	friendly, green technology, environment
		friendly
Door		freezer on top, freezer on bottom, dual zone
Configuration	Double Door br>Bottom Mount	cooling, separate compartments, optimized
Comiguration		storage, easy access design
C	6-Stage Intelligent Inverter Compressor	adaptive cooling, variable speed, quiet
Compressor		operation, energy saving compressor, smart
Technology		cooling, temperature sensing
		no defrosting, auto defrost, ice buildup
Defrosting	Frost-Free	prevention, maintenance-free, convenience
		feature, time-saving
Was at all la		vegetable storage, fruit keeper, produce
Vegetable	35L Jumbo Vegetable Box	freshness, crisper drawer, humidity controlled,
Storage		garden fresh, extended shelf life
		durable shelves, heavy load capacity, spill-
Shelf Material	Toughened Glass (100KG Load Bearing)	proof, easy cleaning, adjustable height,
		flexible storage
	1.10	long-term protection, peace of mind, quality
Warranty	1+10 years (1 year comprehensive, 10	assurance, decade coverage, compressor
	years on compressor)	guarantee, reliable performance

Attribute	Value Range	Hot Keywords for Search	
Special Features	Prime Convertible < br > Al Econavi	convertible freezer, flexible storage, intelligent cooling, smart temperature, adaptive settings, custom modes	
Color Options	Shining Silver < br > Diamond Black < br > Electric Grey < br > Mirror Glass	decor matching, elegant design, modern look,	
Price Range	budget refrigerator, premium cooling, luxu refrigerator, affordable storage, family fridg advanced cooling solution		
<b>Model Year</b> 2022, 2023		latest model, current generation, newest features, updated design, fresh technology	

# 4. Washing Machines (16 Products)

Attribute	Value Range	Hot Keywords for Search	
Capacity	5 Kg (18.8%) < br>6 Kg (6.2%) < br>7 Kg (37.5%) < br>8 Kg (12.5%) < br>10 Kg (18.8%) < br>12 Kg (6.2%)	small family washer, bachelor washing machine, large family laundry, heavy load washer, bulk washing, bedding washer, comforter washing	
Energy Rating	5 Star (100%)	energy efficient, power saving, low electricity, eco-friendly, green appliance, utility bill reduction, economical operation	
Туре	Fully-Automatic	time-saving, convenience appliance, easy washing, no manual intervention, set and forget, busy lifestyle, working professional	
Loading Type	Top Load (87.5%) < br > Front Load (12.5%)	space saving, water efficient, gentle washing, fabric care, quick loading, easier loading, stain removal, accessible design	
Wash Programs	Up to 15 Wash Programs < br > Stain Genius (50+ stains) < br > Customized Programs (up to 672)	cotton wash, delicate wash, quick wash, heavy duty, jeans wash, baby clothes, woolen wash, silk wash, bedding program, curtain wash	
Drying Technology	Drynamic Spin (up to 20% faster drying)	quick dry, efficient spinning, time-saving, moisture removal, faster laundry completion, ready-to-wear, shorter drying time	
Smart Features	Miraie WiFi Connectivity < br> Wash Wizard < br> Customized wash programs	remote control wash, start from office, scheduled washing, smartphone controlled, voice control, intelligent washing, guided operation	
Cleaning Technology	Active Foam Wash Technology Smart Built-in Heater Prescription of the second of the sec	stain removal, sanitize wash, germ kill, deep clean, thorough cleaning, hot wash, hygiene wash, allergy care, sensitive skin	

Attribute	Value Range	Hot Keywords for Search	
Special Programs	Steam Care < br > Baby Care	wrinkle removal, refresh cycle, gentle baby clothes, sensitive skin protection, allergen removal, fabric care, delicate washing	
Warranty	2 years comprehensive < br>> 5-10 years on motor	long-term protection, motor guarantee, quality assurance, durability promise, reliable performance, worry-free operation	
Color	Charcoal Inox Grey Silver	premium finish, fingerprint resistant, modern look, stylish design, contemporary appearance, elegant color, laundry room decor	
Price Range	₹8,990 - ₹32,990	budget washer, affordable laundry, premium washing machine, value for money, costeffective, durable machine, long-lasting washer	
Motor	Heavy Duty Motor	powerful performance, quiet operation, long- lasting motor, durable build, robust construction, reliable engineering	

# 5. Cameras (33 Products)

Attribute	Value Range	Hot Keywords for Search
Camera Type	Mirrorless MFT < br > Mirrorless Full- Frame	lightweight camera, professional camera, content creation, vlogging camera, travel photography,
		street photography, filmmaking
		crop sensor, full frame quality, sensor size, image
Sensor Size	Micro Four Thirds (MFT) < br > Full-Frame	quality, low light performance, dynamic range,
		bokeh capability
	16MP (3.0%) < br> 24.2MP (21.2%)	high resolution, detailed images, large prints,
Resolution	    	portrait quality, landscape detail, commercial
		photography, sharp images
		lens ecosystem, interchangeable lenses, wide
Lens Mount	L-Mount Micro Four Thirds	angle lens, telephoto lens, zoom lens, prime lens,
		macro lens, portrait lens
Video	4K 60p C4K FHD 280p bit recording	video production, cinematic video, slow motion,
Capabilities		film-like footage, YouTube quality, content
Capabilities		creation, professional filming
	Dhace Detection chry Tracking	action photography, sports photography, wildlife
Auto Focus	Phase Detection < br> A Falsay Subject Detections	shooting, bird photography, moving subjects, fast
	AF Subject Detection	focusing, eye detection
_		action capture, sports photography, wildlife
Burst	Up to 75 FPS (AFS) < br>60 FPS (AFC)	moments, decisive moment, continuous shooting
Shooting		sequence photography, rapid shooting
	Weather Sealing < br > IBIS (up to 8-stop)	outdoor photography, stabilized video, handheld
Special	High Resolution Mode (up to	shooting, low light photography, night shooting,
Features	100MP)	tripod-free, adventure photography
Weather	Weather-Sealed Construction	outdoor shooting, rain protection, dust resistance
Protection	rugged camera, adventure photography, all-	

Attribute	Value Range	Hot Keywords for Search	
		weather shooting, travel durability	
Color	Black, Silver	professional look, classic design, discreet appearance, elegant finish, traditional camera color	
Price Range	₹17,247 - ₹249,156	entry-level camera, prosumer camera, professional camera, hobbyist photography, semi-professional, budget friendly, high-end camera	
Special Modes	High Resolution Mode Real Time	landscape detail, commercial quality, color grading, film look, cinema style, professional colo post-production settings	

# 6. Small Appliances (17 Products)

Attribute	Value Range	Hot Keywords for Search
Appliance Type	Vacuum  Cleaner Trimmer Iron Blender Rice Cooker	home cleaning, grooming tools, kitchen gadgets, household helpers, daily use appliances, convenience tools, cooking appliance
Dust Capacity	2.2L, 18L (Vacuum Cleaners)	high capacity cleaning, large dust bin, whole house vacuum, extended cleaning, fewer emptying, continuous operation
Filter Type	HEPA Anti-Bacterial Copper Fabric Infused	dust allergy, pet hair removal, allergen control, air purification, clean exhaust, asthma friendly, allergy protection
Design Features	Compact < br > Lightweight < br > Waterproof	easy storage, portable appliance, space-saving design, travel friendly, bathroom use, shower safe, wet environment
Operation	Corded < br > Cordless < br > Rechargeable	power-free operation, battery operated, cable-free, unrestricted movement, flexible use, anywhere operation
Special Features	Wet & Dry Usage < br > 2-in-1 < br > 4-in-1 Functionality	versatile use, multi-purpose tool, all-in-one solution, multiple function, adaptable appliance, convertible design
Accessories	Cleaning Brush < br > Crevice Nozzle < br > Dusting Brush < br > Trimmer Heads < br > Shaver Heads	complete kit, accessory pack, versatile attachments, specialized

Attribute	Value Range	Hot Keywords for Search
		tools, custom applications, multi-
		surface cleaning
		battery life, charging time, power
Power	Battery (AA) < br > Rechargeable Battery < br > Electric	duration, cordless operation,
Source	battery (AA) \ Di > Nechargeable battery \ Di > Electric	outlet-free, portable power,
		travel friendly
		precision cutting, detailed
Precision	0.2mm trimming (Trimmers)	grooming, accurate trimming,
Precision	0.211111 tillilling (Hillilliers)	fine detail, controlled styling,
		exact length, customizable trim
		overnight charging, battery
Charging		readiness, usage cycle, power
Time	8 Hours (for rechargeable models)	management, operation
		planning, usage time
		color preference, decor
Color	Blue, Green, Black, White (varies by product)	matching, personal style, visual
Coloi	blue, Green, black, writte (values by product)	appeal, design aesthetic,
		contemporary look
		budget appliance, affordable
		tool, value for money, cost-
Price Range	₹1,090 - ₹12,750	effective, everyday use, basic
		appliance, premium small
		appliance
4		<u> </u>

# 7. Audio (8 Products)

Attribute	Value Range	Hot Keywords for Search
		home theater, surround sound,
Speaker	2.16h (25.00() .h., 5.16h (75.00()	immersive audio, cinema sound,
Configuration	2.1Ch (25.0%) < br> 5.1Ch (75.0%)	speaker system, music system,
		entertainment setup
		powerful audio, loud sound, party
	160W (25.0%) 400W (37.5%) 600W	speakers, concert-like, room-filling
Power Output	(37.5%)	sound, bass-heavy, distortion-free,
		high volume
		wireless music, TV sound, phone
	Bluetooth HDMI AUX Wireless	connection, multiple device, streaming
Connectivity	Surround	audio, smart connectivity, cable free
		setup
		distance operation, convenient
	Remote Control < br>> Touch Control	control, easy adjustment, intuitive
Controls		interface, accessible functions, user
		friendly
		rich bass, movie sound effects, clear
	Deep Bass < br > Dolby Digital Plus < br > 3D	vocals, balanced audio, cinema
Sound Features	Surround Sound	experience, music clarity, sound
		separation
		cable-free setup, clean installation,
Speaker Type	Wireless Surround < br > Soundbar Systems	minimalist audio, space-saving sound,
		flexible positioning, easy arrangement
		premium appearance, quality
Design		construction, durable build, elegant
Features	Metal Grille < br > Touch Panel	finish, sophisticated look,
		contemporary design

Attribute	Value Range	Hot Keywords for Search
Color	Black	classic look, matches equipment, versatile color, home theater aesthetic, blends with decor
Price Range	₹8,066 - ₹32,990	budget audio, affordable sound system, premium speakers, entry-level home theater, audiophile quality, value sound system
SC-HTS Series < br > (SC-HTS600GWK, SC-HTS400GWK, SC-HTS160GWK)		model comparison, feature differences, series upgrade, technology level, performance tier, audio lineup

# 8. Microwave Ovens (8 Products)

Attribute	Value Range	Hot Keywords for Search
		small microwave, compact oven,
Compaitre	201 (27 50)) do a 221 (25 00)) do a 271 (27 50))	family size, large capacity,
Capacity	20L (37.5%) < br> 23L (25.0%) < br> 27L (37.5%)	apartment oven, countertop
		microwave, space-saving design
		baking microwave, grilling oven,
Trees	Convection	multi-function cooking, versatile
Туре	Convection	cooking, all-in-one appliance,
		complete cooking solution
		baking oven, grilling microwave,
Cooking	Crill days Balas days Cards days Defract days Balant	cake baking, pizza making, bread
Functions	Grill < br > Bake < br > Cook < br > Defrost < br > Reheat	baking, auto cooking, preset recipes
		roast function
		preset recipes, one-touch cooking,
Auto Cook	61, 121, 137 Auto Cook Menus	auto chef, programmed cooking,
Menus	01, 121, 137 Auto Cook Menus	recipe memory, gourmet settings,
		specialized cooking
		healthy cooking, fast cooking, even
Special	360° Heat Wrap Magic Grill Zero Oil	heating, no hot spots, crispy grilling,
Features	300 Heat Wrap Sur Magic Grin Sur Zero Oii	oil-free cooking, diet cooking, quick
		meals
		small family, couple cooking, family
Family Size	Suitable for 2.4 femily manuals are	meals, appropriate size, right
Family Size	Suitable for 2-4 family members	capacity, household size, serving
		capacity
Warranty	1 Year on Product > 5 Years on Magnetron	component protection, long-term
		guarantee, quality assurance, repair

Attribute	Value Range	Hot Keywords for Search
		coverage, parts warranty, service
		commitment
		kitchen decor, stylish microwave,
Color/Dosign	Black Floral < br > Black Mirror +	modern kitchen, elegant design,
Color/Design	Golden	premium look, designer appliance,
		aesthetic appeal
		budget microwave, affordable
Price Range	₹5,890 - ₹17,790	cooking, value microwave, premium
Price Range		oven, cost-effective cooking, entry-
		level, high-end convection
		model lineup, feature comparison,
Model Series	NN-CT Series br>(NN-CT35MBFDG, NN-	series differences, technology levels,
Wiodel Selles	CT353BFDG, NN-CT64HBFDG)	cooking capabilities, premium
		features
		diet friendly, healthy cooking, low
Health	Zon O'l Boring de Nobriti e continue	calorie, nutrition preservation,
Features	Zero Oil Recipes < br > Nutritive cooking options	wholesome meals, health conscious,
		calorie control

# 9. Accessories (12 Products)

Attribute Value Range		Hot Keywords for Search
Accessory Type	Liquid Fabric Detergent < br > AC Dust Cover < br > Wall Mounting Bracket	laundry care, appliance protection, installation accessories, cleaning solutions, maintenance products, hardware support
Compatibility	Compatible with all washers < br > Fits 1-1.5  Ton AC < br > Universal fitting	universal use, multi-brand compatible, fits all models, standard size, adjustable mount, flexible use, versatile accessory
Volume/Capacity	1000 ml (detergent)	bulk purchase, long-lasting supply, value pack, economic size, multi-wash, month supply, large bottle
Material Polyester Fabric < br > Powder Coated Metal		durable material, weather resistant, long lasting, industrial grade, robust construction, quality material, fade resistant
Special Features	Stain Removal < br > Dust & Water Protection < br > Load Bearing	tough stains, gentle fabric care, outdoor protection, weather shield, monsoon protection, weight support, sturdy mount
Application	Safe for silk/woollen/delicates < br > Top/front loader compatible < br > Outdoor units	fabric safety, gentle cleaning, versatile application, multi-purpose, adaptable use, flexible application
Durability	Long-lasting Highly Durable	extended lifespan, quality construction, weather resistant, UV protection, fade resistant, tear resistant, robust design
Price Range	₹153 - ₹1,600	economical accessory, affordable addition, essential accessory, value

Attribute	Value Range	Hot Keywords for Search
		addition, cost-effective, budget friendly
		cost savings, efficiency improvement,
Maintenance	Reduces maintenance cost Prolongs	performance enhancement, extended
Benefits	appliance life	lifespan, operational benefits,
		maintenance reduction
		DIY installation, easy setup, professional
Installation Type	Wall Mounting < br > Direct application	quality, quick installation, no tools
		needed, straightforward application
Durand		universal fit, multi-brand support,
Brand	Works with most popular AC brands	generic accessory, widely compatible,
Compatibility		brand-independent, versatile fitting
4	'	<b>•</b>

# **Attribute Value Distribution Analysis**

# **AC Tonnage Distribution**

Tonnage	Count	Percentage	Price Range (₹)
0.9 Ton	1	2.6%	~35,000
1.0 Ton	9	23.7%	30,990 - 45,990
1.4 Ton	1	2.6%	~40,000
1.5 Ton	17	44.7%	32,990 - 55,990
2.0 Ton	8	21.1%	39,990 - 67,990
2.2 Ton	2	5.3%	45,990 - 55,990
4	1	•	•

## **TV Size Distribution**

Screen Size	Count	Percentage	Price Range (₹)
32 inches	2	12.5%	15,990 - 19,990
43 inches	5	31.3%	25,990 - 39,990
55 inches	5	31.3%	45,990 - 85,990
65 inches	3	18.7%	95,990 - 179,990
75 inches	1	6.2%	239,990
4		1	•

# **Refrigerator Capacity Distribution**

Capacity	Count	Percentage	Price Range (₹)	
260L	1	5.0%	27,990	
280L	4	20.0%	28,990 - 32,990	
309L	7	35.0%	29,990 - 36,990	
338L	4	20.0%	33,990 - 39,990	
400L	2	10.0%	45,990 - 56,990	
450L	2	10.0%	57,990 - 71,990	
<b>▲</b>				

# **Washing Machine Capacity Distribution**

Capacity	Count	Percentage	Price Range (₹)	Loading Type	
5 Kg	3	18.8%	8,990 - 12,990	Top Load	
6 Kg	1	6.2%	13,990	Top Load	
7 Kg	6	37.5%	14,990 - 23,990	4 Top Load, 2 Front Load	
8 Kg	2	12.5%	17,990 - 25,990	Top Load	
10 Kg	3	18.8%	24,990 - 29,990	Top Load	
12 Kg	1	6.2%	32,990	Top Load	

## **Loading Type Distribution in Washing Machines**

Loading Type	Count	Percentage	Capacity Range
Top Load	14	87.5%	5 Kg - 12 Kg
Front Load	2	12.5%	7 Kg

## **Energy Rating Distribution**

## **AC Energy Rating**

Star Rating	Count	Percentage	Price Range (₹)
3 Star	23	60.5%	30,990 - 50,990
4 Star	5	13.2%	39,990 - 60,990
5 Star	10	26.3%	42,990 - 67,990
4	I		1

## **Refrigerator Energy Rating**

Star Rating	Count	Percentage	Price Range (₹)
2 Star	8	40.0%	30,790 - 71,990
3 Star	12	60.0%	27,990 - 56,990
4	•	•	<b>•</b>

## **Washing Machine Energy Rating**

Star Rating	Count	Percentage	
5 Star	16	100.0%	
4	·	·	•

# **Microwave Oven Capacity Distribution**

Capacity	Count	Percentage	Price Range (₹)
20L	3	37.5%	5,890 - 8,590
23L	2	25.0%	9,990 - 11,500
27L	3	37.5%	14,990 - 17,790
4	•	•	•

## **Camera Resolution Distribution**

Resolution	Count	Percentage	Price Range (₹)	Sensor Type
16MP	1	3.0%	17,247	MFT
24.2MP	7	21.2%	119,990 - 149,990	Full-Frame
25MP	2	6.1%	170,419 - 195,990	MFT
Other/Unspecified	23	69.7%	89,990 - 249,156	Various

# **Audio Power Output Distribution**

Power Output	Count	Percentage	Price Range (₹)	Configuration
160W	2	25.0%	8,066 - 10,990	2.1Ch
400W	3	37.5%	12,990 - 17,990	5.1Ch
600W	3	37.5%	22,990 - 32,990	5.1Ch
4	•	•	•	

## **Price Distribution Overview**

Price Range (₹)	Number of Products	Percentage
< 5,000	13	7.7%
5,000 - 9,999	9	5.4%
10,000 - 19,999	24	14.3%
20,000 - 29,999	33	19.6%
30,000 - 49,999	49	29.2%
50,000 - 99,999	18	10.7%
100,000 - 199,999	17	10.1%
≥ 200,000	5	3.0%
4	'	•

### **Smart Features Distribution**

Product Category	Wi-Fi/Smart Features Count	Percentage within Category
AC	28	73.7%
Televisions	12	75.0%
Washing Machines	9	56.3%
Refrigerators	6	30.0%
Cameras	8	24.2%
4	'	•

# **Category-Specific Search Keywords**

## 6. Room/Space-Based Search

Search based on intended use location:

• Example: "Bedroom AC" or "Living room TV"

• Example: "Small kitchen microwave" or "Family size refrigerator"

**Example path**: "Bedroom AC" → 150 sq ft → Inverter → Sleep mode

### 7. Capacity-Based Search

Filter by capacity needs across applicable categories:

• Example: "7 Kg washing machine for 3-4 member family"

• Example: "1.5 ton AC for 180 sq ft room"

**Example path**: "400L refrigerator" → Double door → Frost-free → 3 Star

## 8. Usage Scenario Search

Look for products based on specific use cases:

- Example: "Vlogging camera with 4K" or "Party speakers with deep bass"
- Example: "Air purifying AC for allergy" or "Stain removal washing machine"

**Example path**: "Cake baking microwave" → Convection → 27L → Auto menu

#### **Best Practices for Product Retrieval**

#### 1. Use Standardized Terminology

- Follow the attribute naming patterns found in product titles
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- Include model series where relevant (e.g., "MX Series TV")

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- Product titles follow consistent patterns within categories
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## 3. Utilize Key Features for Detailed Filtering

• Key Features contain detailed specifications not always in titles

- Can be used for more granular filtering (e.g., "Toughened Glass Shelves")
- Search for specific technologies (e.g., "Drynamic Spin", "Hexa Chroma Drive")

#### 4. Consider Price-Quality Correlation

- Higher-priced items typically have more advanced features
- Different categories have different price-feature relationships
- Premium features (WiFi, smart functions) are more common in higher price brackets

### 5. Category-Specific Search Tips

- **Televisions**: Focus on size (32/43/55/65/75 inches), resolution, and smart features
- Refrigerators: Capacity (260L-450L), door type, and energy rating are key
- **AC**: Tonnage (0.9/1.0/1.4/1.5/2.0/2.2 Ton), energy rating, and special features matter most
- Cameras: Sensor type, resolution (16MP/24.2MP/25MP), and video capabilities
- **Washing Machines**: Capacity (5/6/7/8/10/12 Kg), loading type (14 Top Load vs 4 Front Load), and wash programs
- Audio: Speaker configuration and output power are primary filters
- **Microwave Ovens**: Capacity (20L/23L/27L) and cooking functions are distinguishing factors
- Small Appliances: Function and special features vary widely
- Accessories: Compatibility with main products is crucial

#### 6. Combine Multiple Search Methods

- Start broad, then narrow down with filters
- Use both technical specifications and benefit-oriented terms
- Combine price filtering with feature requirements
- Consider room size/usage scenario alongside technical specs cost savings, appliance life extension, performance enhancement, efficiency improvement, convenience addition, protection level

- **Compatibility Terms**: universal fit, multi-brand support, size specific, tonnage compatible, model specific, general application
- **Application Terms**: laundry care, outdoor unit protection, wall mounting installation, bracket stability, weather shield, monsoon cover

## **Most Common Color Options**

Product Category	Primary Color	Secondary Colors	
AC	White	-	
Televisions	Black	-	
Refrigerators	Diamond Black	Shining Silver, Electric Grey	
Washing Machines	Charcoal Inox Grey	Dark Silver	
Cameras	Black	Silver	
Microwave Ovens	Black Mirror	Black Floral, Black Mirror + Golden	
4	1	1	▶

## **Effective Search Strategies**

To find and retrieve products efficiently, consider the following search approaches:

## 1. Category-First Search

Start with product category, then narrow down by specific attributes:

- Step 1: Select category (e.g., "Televisions")
- Step 2: Filter by key attribute (e.g., "Size: 43 inches")
- Step 3: Refine by additional features (e.g., "Resolution: 4K")

**Example path**: Televisions → 55 inches → 4K → Smart Google TV → HDR 10+

#### 2. Price-Based Search

Filter products by price range within a category:

- Step 1: Select category (e.g., "Refrigerators")
- Step 2: Set price range (e.g., "₹30,000 ₹40,000")
- Step 3: Sort by price (ascending or descending)

**Example path**: Washing Machines → ₹15,000-₹20,000 → Sort by highest rating

#### 3. Feature-Based Search

Search for products with specific features across all categories:

- Step 1: Search for key feature (e.g., "Inverter technology")
- Step 2: Filter results by category if needed
- Step 3: Compare products with similar features

**Example path**: "WiFi connectivity" → Filter by AC category → Sort by price

#### 5. Combined Attribute Search

Use multiple attributes to narrow down options:

- Example: "5 Star" + "1.5 Ton" + "Wi-Fi" for AC products
- Example: "Front Load" + "7 Kg" + "Steam Care" for washing machines

**Example path**: 7 Kg + Front Load + Wifi + 5 Star (washing machine search)

### 6. Room/Space-Based Search

Search based on intended use location:

- Example: "Bedroom AC" or "Living room TV"
- Example: "Small kitchen microwave" or "Family size refrigerator"

**Example path**: "Bedroom AC" → 150 sq ft → Inverter → Sleep mode

## 7. Capacity-Based Search

Filter by capacity needs across applicable categories:

• Example: "7 Kg washing machine for 3-4 member family"

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**Example path**: "Cake baking microwave" → Convection → 27L → Auto menu

## **Category-Specific Search Keywords**

## **Small Appliances**

- **Technical Search Terms**: motor power, battery life, charging time, filter type, suction power, blade material, heating element, temperature range
- **Function Terms**: multi-purpose tool, versatile appliance, quick operation, precision control, adjustable settings, customizable function
- **Convenience Terms**: easy cleaning, washable parts, compact storage, travel friendly, lightweight design, ergonomic grip, intuitive controls
- **Special Feature Terms**: low noise, energy efficient, detachable accessories, attachment variety, storage case, maintenance indicator

- **Usage Terms**: daily grooming, home cleaning, dust collection, allergen control, pet hair removal, beard trimming, body grooming
- Design Terms: cordless convenience, waterproof design, shower safe, wet/dry operation, bathroom use, kitchen suitable, living room friendly

#### **Accessories**

- **Technical Terms**: material composition, load capacity, compatibility range, installation requirements, dimensions, weight capacity
- **Utility Terms**: protection level, cleaning efficiency, ease of installation, space requirement, adjustability, flexibility, durability
- Maintenance Terms: cleaning frequency, replacement interval, service life, wear resistance, weather protection, corrosion resistance
- **Value Terms**: cost savings, appliance life extension, performance enhancement, efficiency improvement, convenience addition, protection level
- Compatibility Terms: universal fit, multi-brand support, size specific, tonnage compatible, model specific, general application
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Microwave Ovens	Black Mirror	Black Floral, Black Mirror + Golden	•

- **Resolution Terms**: 4K display, Ultra HD, Full HD, 1080p, clarity, sharpness, pixel density, upscaling capability
- **Size-specific Terms**: 32-inch compact, 43-inch mid-size, 55-inch family, 65-inch theater, 75-inch premium, wall-sized, apartment TV

## Refrigerators

- **Technical Search Terms**: cooling technology, defrost system, power consumption, dual cooling, multi-door, digital temperature control
- **Food Storage Terms**: vegetable freshness, fruit storage, dairy section, meat compartment, ice maker, water dispenser, bottle storage
- Lifestyle Terms: family refrigerator, bachelor fridge, kitchen centerpiece, compact cooling, food preservation, meal prep storage
- **Special Feature Terms**: convertible freezer, vacation mode, quick chill, door alarm, antibacterial coating, odor control, fingerprint resistant
- Capacity Terms: 260L small, 280L compact, 309L medium, 338L standard, 400L large, 450L family size, 2-person, 3-4 member family
- **Energy Terms**: 2 Star economy, 3 Star efficient, power saving, electricity bill reduction, green appliance, eco-friendly cooling size, bedding capacity

 Loading Terms: top load convenience, front load efficiency, easy access loading, water efficient, energy saving, space saving design

#### **Cameras**

- Technical Search Terms: sensor size, crop factor, lens mount, EVF resolution, buffer capacity, dynamic range, color depth, ISO performance
- Photography Terms: portrait camera, landscape shooter, macro photography, wildlife tracking, night photography, street shooting, travel camera
- **Video Terms**: documentary filming, YouTube camera, vlogging setup, interview shooting, cinematic look, slow motion capture, time-lapse
- **Professional Terms**: professional grade, studio quality, commercial photography, wedding camera, event coverage, product photography
- Resolution Terms: 16 megapixel budget, 24MP full-frame, 25MP high detail, megapixel count, detail capture, large print capability
- **Feature Terms**: image stabilization, weather sealing, articulating screen, touch control, eye detection, animal tracking, vehicle tracking

#### **Microwave Ovens**

- **Technical Search Terms**: wattage, turntable size, control type, program count, pre-heat function, multi-stage cooking, cavity material
- **Cooking Terms**: baking microwave, grilling function, roasting capability, defrost setting, reheat mode, fermentation setting, steam cooking
- **Recipe Terms**: cake maker, pizza oven, bread baker, popcorn setting, auto cook menu, Indian cooking, international cuisine, dessert maker
- **Convenience Terms**: child lock, quick start, memory function, auto clean, odor removal, steam clean, easy maintenance, fingerprint resistant

- **Capacity Terms**: 20L compact, 23L standard, 27L family size, small kitchen, apartment size, family cooking, multi-serving capacity
- **Feature Terms**: convection capability, auto cooking programs, pre-programmed recipes, zero oil cooking, healthy options, quick meals

## **Audio Systems**

- **Technical Search Terms**: frequency response, impedance, THD rating, audio format support, driver size, amplifier class, crossover setup
- **Sound Terms**: bass boost, mid-range clarity, vocal enhancement, treble adjustment, surround simulation, virtual 3D, sound field expansion
- Usage Terms: movie audio, music system, gaming sound, podcast listening, party speakers, outdoor audio, ambient sound, background music
- **Connectivity Terms**: multi-room audio, HDMI-ARC, optical input, Bluetooth range, NFC pairing, multi-device connection, wireless subwoofer
- **Configuration Terms**: 2.1 channel stereo, 5.1 channel surround, satellite speakers, soundbar setup, wireless rear speakers, powered subwoofer
- **Power Terms**: 160W starter system, 400W mid-range, 600W powerful, room-filling sound, party volume, distortion-free amplification

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• Step 1: Search for key feature (e.g., "Inverter technology")

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**Example path**: "WiFi connectivity" → Filter by AC category → Sort by price

### 4. Model Number Search

Direct search using exact model numbers for precise retrieval:

• Example: "TH-43MX660DX", "NR-TG321CUSN", "NA-F70CH3CRB"

**Example path**: "DC-G9M2LGW" (exact camera model)

#### 5. Combined Attribute Search

Use multiple attributes to narrow down options:

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- Example: "Front Load" + "7 Kg" + "Steam Care" for washing machines

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