

**Displays** 

**IHS TECHNOLOGY** 

# Displays

End-to-end research on the entire display industry, with detailed coverage of the supply chain, materials and components, equipment, touch panels, shipments, pricing, supply, demand and cost modeling.



#### **Research Types**

### **Research Type Description**

#### **INTELLIGENCE SERVICES**

Real-time access to continually updated market data and forecasts, analyst insights, topical research reports, and analyst presentations.

#### **REPORTS**

Topical reports addressing key focus areas with indepth analysis on market and technology trends.

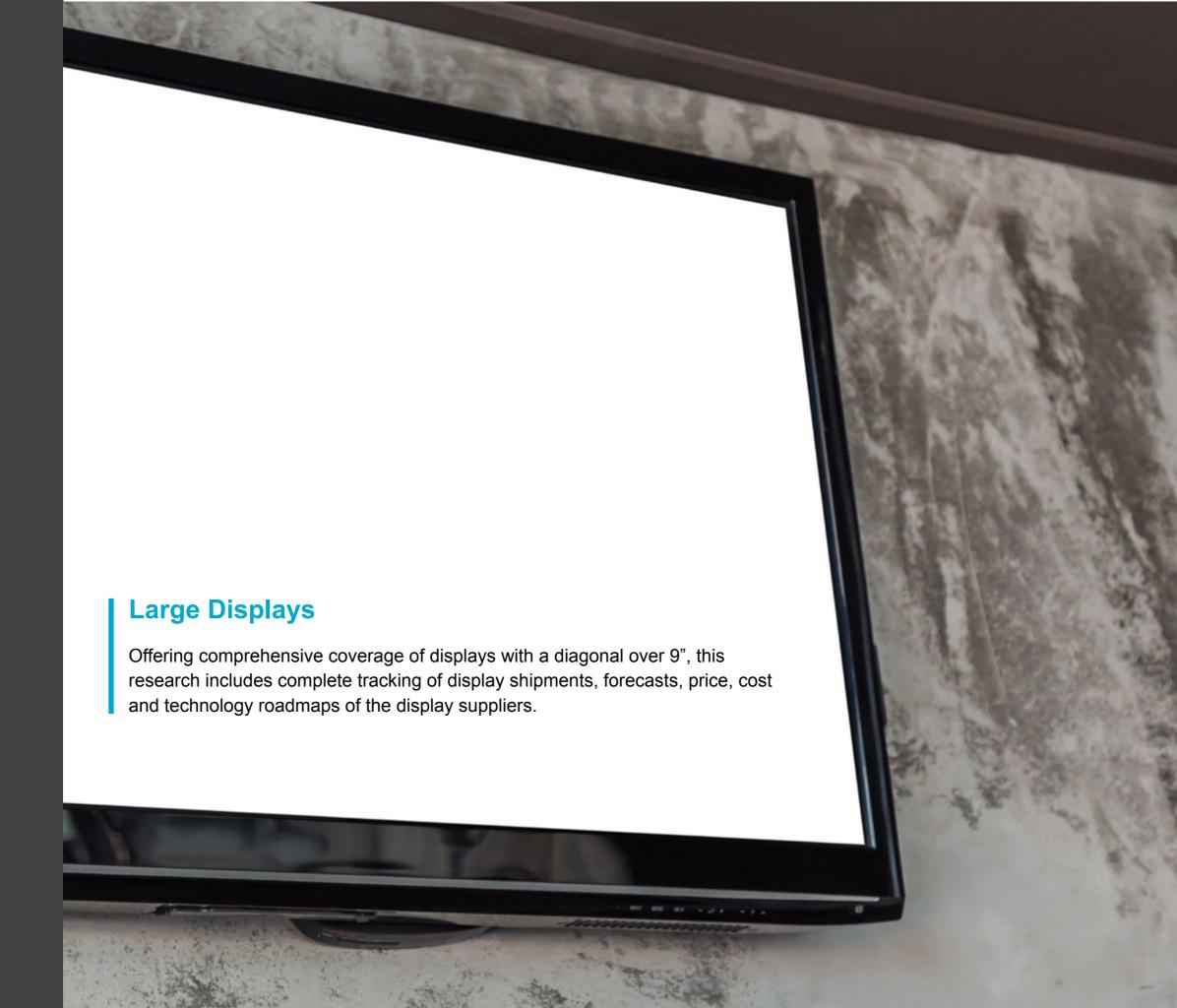
#### **MARKET TRACKERS**

Frequent analyses and forecasts designed to provide timely visibility into relevant market and technology trends.

#### **CUSTOM & CONSULTING**

Building on our wealth of existing research and data, and conducting additional research when necessary, our analysts and consultants transform the results of the research into meaningful analyses and action-oriented recommendations.







### **Large Displays**

#### LARGE AREA DISPLAY PRICE TRACKER

Monthly panel price updates for large-area applications including notebooks, LCD monitors, and LCD TVs. With 6 months of results and 12 months of forecasts, the tracker offers a useful overview of the large-area display market. It also includes detailed feature coverage including size, resolution, BLU type, slim type, frame rate, and interface.

#### Learn more

## LARGE AREA DISPLAY PRODUCTION STRATEGY TRACKER

Quarterly coverage of panel makers' production plans in each fab generation, covering suppliers, display technologies, applications, and sizes. In addition to TFT LCD, large-area AMOLED production plans are also included. Subscribers gain access to historical results and forecasts of panel makers' detailed production mixes and fab loading.

#### **Learn more**

#### LARGE AREA DISPLAY MARKET TRACKER

Monthly and quarterly research surveying all large-area panel makers, covering the entire range of large area display panels shipped worldwide and regionally. The monthly deliverable provides the previous month's results with a detailed breakdown. The quarterly deliverable highlights historical shipments and forecasts of rolling four quarters for each panel maker.

#### Learn more

## LARGE AREA DISPLAY PRODUCT ROADMAP TRACKER

Quarterly coverage of the latest technology trends and panel product developments shaping the display industry. Subscribers can stay current on what suppliers and competitors have in their product pipelines, and support forward planning with coverage of the latest technologies and emerging trends. Trends are analyzed by application, panel size, and format.



### **Large Displays**

## DISPLAYS PRODUCTION AND INVENTORY TRACKER

Monthly coverage of the status of display fab management, production, shipment and inventory. Details include design capacity, glass input, and utilization rate by each LCD fab, as well as shipments by application, size, and resolution. Estimated TV and IT panel inventory tracking and forecasts for each panel maker.

#### Learn more

#### TV DISPLAY INTELLIGENCE SERVICE

The most comprehensive service for all aspects of displays for TVs. This service is updated in real time, tracking panel shipments, OEM production and forecasts, TV display supply chain matrix, panel prices, feature trends, supply and demand, global market trends and more. This is "must-have" analysis if your business is involved with TV industry.

Coming soon

#### LARGE AREA DISPLAY COST MODEL

Quarterly coverage of panel cost structure, forecasts and profitability of each mainstream panel for applications including LCD TV, monitor and notebooks. The simulation-enabled parametric cost model offers users the flexibility to generate different forecasts based on their own data inputs and assumptions. The cost model also enables users to change parameters such as component costs, panel prices, panel yield and fab utilization to fine-tune costs reflecting their actual panel conditions.







### **Small & Medium Displays**

#### SMARTPHONE DISPLAY INTELLIGENCE SERVICE

The most comprehensive service covering all aspects of displays for smartphones. This service, updated in real time, tracks and forecasts smartphone display shipments, reports display prices, analyzes the supply chain, and offers detailed cost breakdowns of selected smartphone display sizes and resolutions, for both LCD and OLED. This is "must-have" analysis if you are a player in the smartphone market.

Coming Soon

#### SMARTPHONE & TABLET DISPLAY COST MODEL

Quarterly research on all smartphone and tablet LCD module and cell costs structures, forecasts and the profitability of each mainstream panel. The simulation-enabled parametric cost model offers users the flexibility to generate different forecasts based on their own data inputs and assumptions. It also enables users to change parameters such as component costs, panel prices, panel yield and fab utilization to fine-tune costs reflecting their actual panel conditions.

Learn more

## NOTEBOOK & TABLET DISPLAY INTELLIGENCE SERVICE

The most comprehensive service covering all aspects of displays for tablets and notebooks. This service, updated in real time, tracks panel shipments in detail, OEM production and forecasts, the supply chain, panel prices, feature trends, supply and demand, global market trends and much more. This is "must-have" analysis for notebook and tablet industry players.

Coming Soon

#### **OLED DISPLAY MARKET TRACKER**

Quarterly research on OLED displays shipped worldwide and regionally, with the industry's most insightful look at historical shipments and forecast projections for the OLED display market. New OLED applications, models, product trend analysis, and OLED panel makers' strategies are also included.



### **Small & Medium Displays**

#### SMALL MEDIUM DISPLAY MARKET TRACKER

Quarterly shipment and revenue tracking for all small medium displays. Display shipments by application, size, resolution and display technology with 4-year quarterly forecasts and additional 3-year annual forecasts are provided.

#### Learn more

## WEARABLE DISPLAY MARKET & TECHNOLOGY REPORT

Annual research providing comprehensive analysis of the wearable display market and technology developments.

#### Learn more

#### SMALL MEDIUM MAKER STRATEGY REPORT

Annual research providing comprehensive analysis of the strategies of small medium display suppliers, using shipments and forecasts, capacity, and value chain information focused on smartphone and automotive displays.

#### Learn more

#### SMALL MEDIUM DISPLAY SUPPLY CHAIN TRACKER

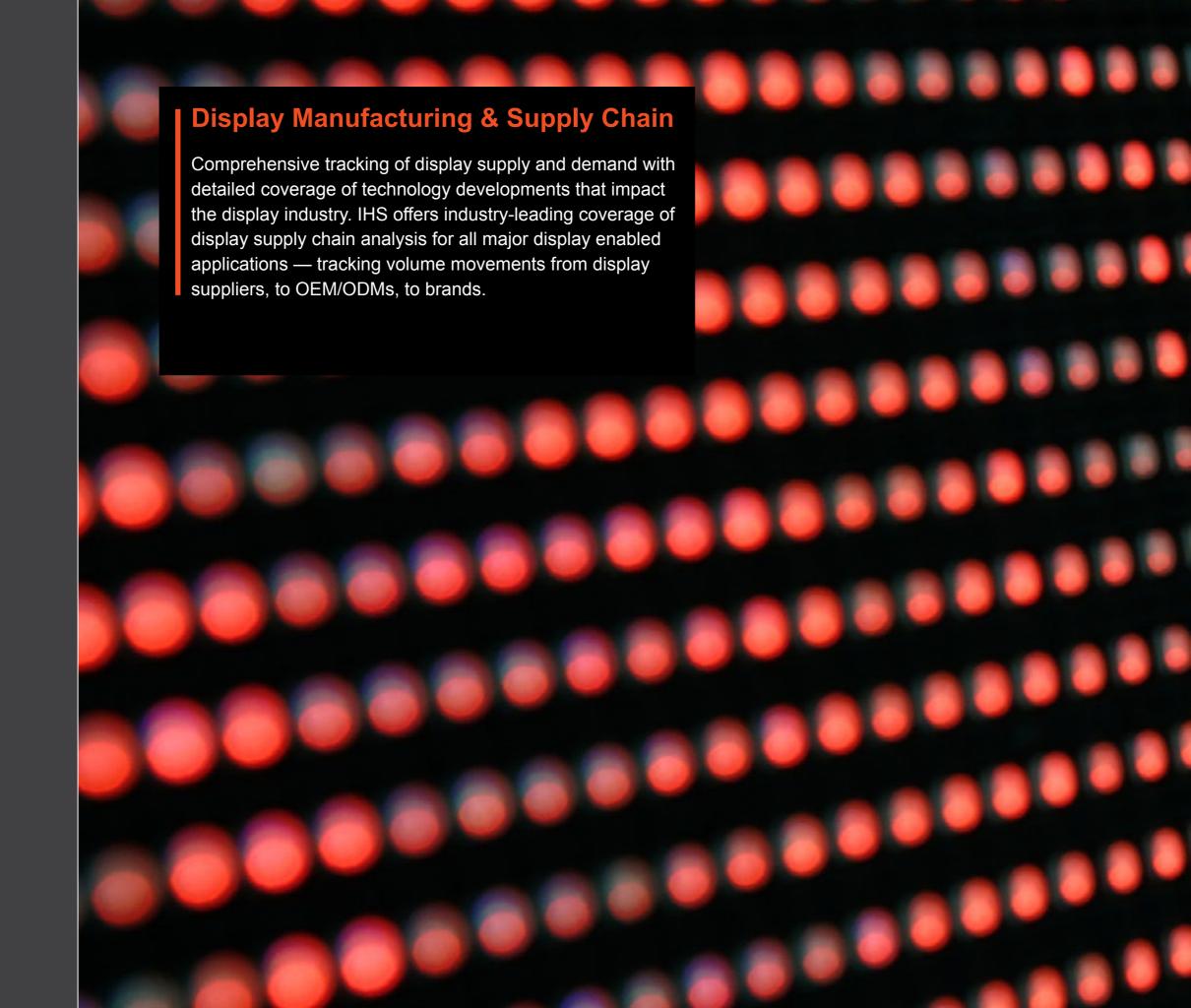
Quarterly coverage of supply chain relationships between small medium display suppliers and set makers. The tracker provides shipments from display suppliers to set makers segmented by quarter and application. Users can analyze combinations of display suppliers, set makers, applications, display technologies.

#### Learn more

#### **AUTOMOTIVE DISPLAY MARKET TRACKER**

Quarterly data and analyses of the global market for automotive displays on a unit, area, value, and average-selling price basis, with details on applications, technologies, display sizes, and pixel formats. Key market trends and insights into the automotive supply chain, including tier 1 display system integrators are provided.







### **Display Manufacturing & Supply Chain**

#### DISPLAY DYNAMICS INTELLIGENCE SERVICE

Providing over 20 insights per month, this service offers timely information and analysis covering major issues in the display industry. Instant analysis of hot topics and developments in the LCD and OLED industries, along with display applications such as smartphones, tablets, TVs, monitors, notebooks, public displays and handheld applications are covered in detail.

#### Learn more

## DISPLAY SUPPLY DEMAND & EQUIPMENT TRACKER

Quarterly coverage of fab activity, capacity, utilization, supply/demand, capital spending, financial information, and relevant news analysis for the entire FPD supply chain. With coverage of all industry participants, and key analytical metrics, this tracker delivers the most current and complete view of both the supply and demand sides of the industry.

#### Learn more

## DISPLAY DYNAMICS INTELLIGENCE SERVICE - PREMIUM

This premium version of the Display Dynamics Intelligence Service offers more detailed analysis of the overall display market. Covering all display applications, the service offers a high-level view of display shipments, inventory, prices, fab utilization, supply chain, OEM/ODM production and shipments, set inventories, and component supply/demand. Additional premium deliverables include a monthly market brief and database, as well as client presentations.

Coming soon

## DISPLAY LONG-TERM DEMAND FORECAST TRACKER

Quarterly worldwide shipments and forecasts for all major flat panel display applications. The quarterly updated tracker is viewed as a dictionary of the flat panel display industry, covering all types of technologies, features, sizes, resolutions, units, prices, revenues, and area.

Coming soon



### **Display Manufacturing & Supply Chain**

#### **OLED DISPLAY COST MODEL**

Quarterly coverage of all OLED panels, including smartwatch, smartphone, tablet and TV applications in terms of cost structure, forecast and the profitability of each mainstream panel. The simulation- enabled parametric cost model offers users the flexibility to generate different forecasts based on their own data inputs and assumptions. It also enables users to change parameters such as component costs, panel prices, panel yield and fab utilization to fine-tune costs reflecting their actual panel conditions.

#### Learn more

#### MONITOR DISPLAY SUPPLY CHAIN TRACKER

Quarterly coverage of supply chain relationships between panel makers, OEM/ODM subcontract manufacturers, and brands. This tracker provides the most detailed and comprehensive supply chain data for LCD monitors, utilizing actual shipments. Relationships between suppliers and brands by panel size and OEM volumes are covered in detail.

#### Learn more

#### **OLED TECHNOLOGY MARKET TRACKER**

Semi-annual in-depth analysis of the OLED market and technology, as well as display supplier strategies. Detailed supply and demand issues are covered in addition to supplier analysis pertaining to developing OLED strategies, cost breakdowns, technical roadmaps, manufacturing processes, supply chain and intellectual property analyses.

Coming soon

#### FLEXIBLE DISPLAY MARKET TRACKER

Semi-annual in-depth analysis of flexible display market dynamics through deep analysis of industry trends, status of players and technology issues. Long-term forecasts as well as new emerging applications using flexible displays are covered. In addition, assessments of components, material, and equipment providers within the flexible display supply chain are provided.

Coming soon







### **Display Materials & Components**

#### OLED MATERIALS MARKET TRACKER

Quarterly research on OLED materials and demand. Revenue forecasts and insight into OLED display makers' supply chain activities enable clients to identify market opportunities and challenges. A comprehensive OLED materials technology review by device structure, material type, deposition method, and luminescent mechanism is provided.

#### Learn more

#### DISPLAY DRIVER IC MARKET TRACKER

Quarterly research on shipments, prices, revenue, supply chain dynamics, wafer foundries, new technologies, interfaces, and display resolutions that influence driver ICs across all applications. The tracker provides detailed quarterly analyses of the TFT LCD driver IC market for all flat panel display market segments, while also providing information about the technologies and companies that play in this space.

#### Learn more

#### WIDE COLOR GAMUT MARKET TRACKER

Semi-annual in-depth analysis of the wide color gamut market, including quantum dot technology. Manufacturing processes of various wide color gamut technologies as well as development trends, market issues and overall shipments to different applications are examined through this tracker.

#### Coming Soon

#### DISPLAY BACKLIGHT MARKET TRACKER

Quarterly coverage of the entire value chain for large area TFT LCD backlights. The tracker offers analysis of shipments, relationships between backlight suppliers, panel makers, LED makers, and backlight makers. New technology developments, industry news as well as trends in prices, supply/demand, and cost structures are provided.



### **Display Materials & Components**

#### DISPLAY GLASS MARKET TRACKER

Quarterly research on capacity, shipments, new glass tank schedules, volumes by location and supplier, glass substrate supplier and panel maker relationships, supply/demand analysis, price, revenues, and new glass substrate product trends. Coverage of supplier capacity, shipments, prices, demand forecasts, and much more, including touch cover glass, is provided

#### Learn more

#### AMOLED ENCAPSULATION MATERIALS REPORT

Annual research on the different encapsulation materials used in AMOLED displays.

Coming Soon

#### AMOLED DEVICE STRUCTURE REPORT

Annual research on developments in AMOLED display devices produced by Samsung Display and LG Display. The supply chain for device materials, applications, development status, and M.P. planning are covered in detail.

#### Learn more

#### DISPLAY OPTICAL FILM MARKET TRACKER

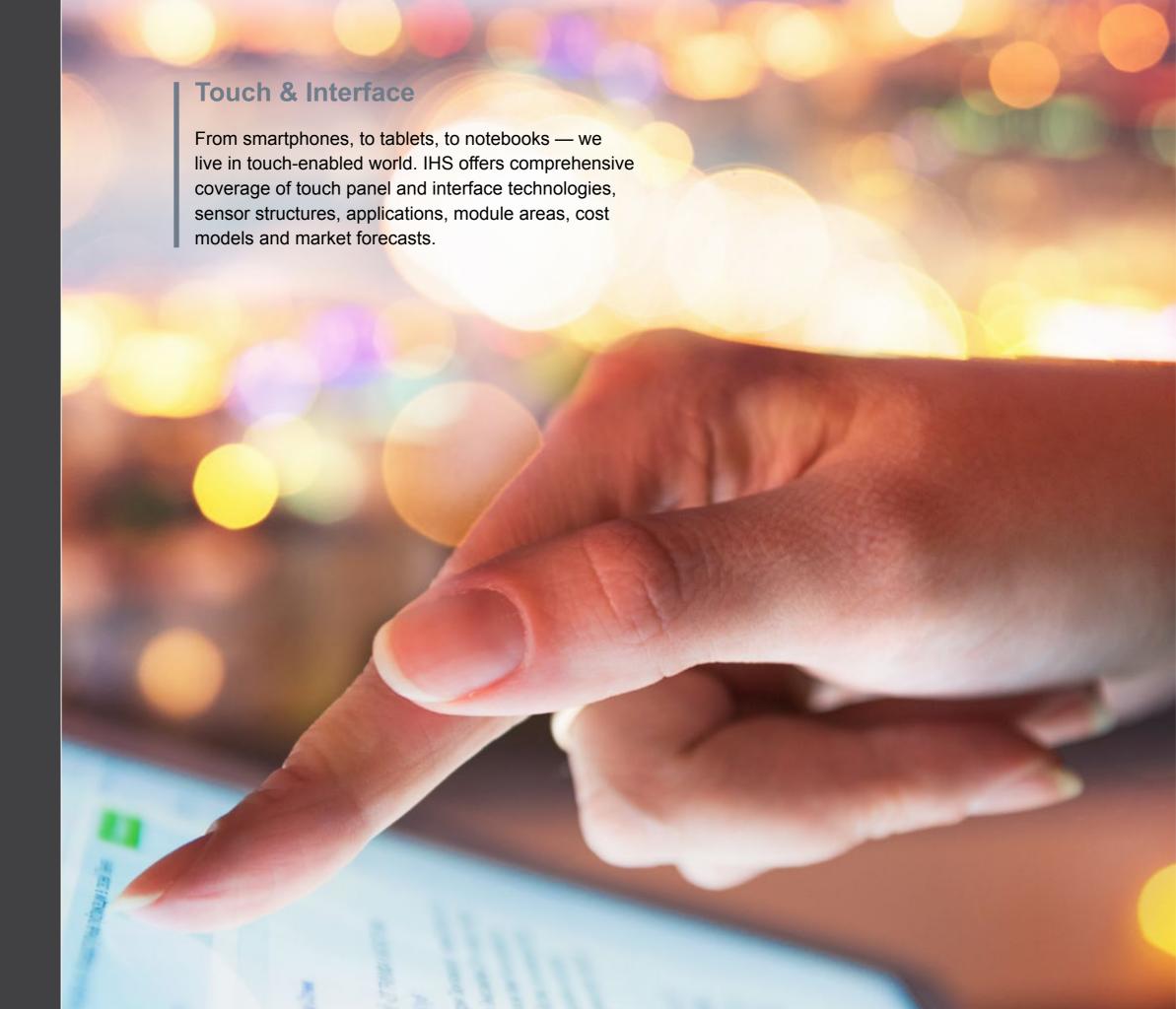
Quarterly coverage of polarizer and backlight-related films for TFT LCDs shipments, market share, capacity changes, value chain relationships, prices, supply/demand, revenue, technology developments, and cost reduction efforts are covered in this comprehensive research. Demand and revenue forecasts, market share analyses, and price and cost analyses are also included.

#### Learn more

#### DISPLAY CHEMICAL MATERIALS REPORT

Annual research on the top 7 chemical materials used in LCD manufacturing. The key materials include photoresist, etchant, stripper, and developer, which are used in manufacturing both TFT arrays and color filters. The remaining three are RGB resist, resin BM, and photo spacer, which are used in making color filters. The report offers analysis for the global demand trends by region, major panel maker, and production line.







### **Touch & Interface Research Page**

#### TOUCH PANEL MARKET TRACKER

Quarterly comprehensive analysis of touch panel technologies, sensor structures, applications, module area, cost models and market forecasts. IHS surveys and profiles more than 100 makers of touch panel modules (including add-on types and embedded types from panel makers) to produce this tracker. Shipments and revenues for over 100 touch panel makers are included.

#### Learn more

## TOUCH SENSOR TECHNOLOGY & MARKET REPORT

Annual survey results of touch sensor production, a 3-year sensor market forecast, information on sensor structure evolution and trends in new ITO replacement materials are provided. Insight into competitive strategies, capacity, and investment are included, in addition to historical trends and demand forecasts by touch sensor structure.

#### Learn more

#### **AUTOMOTIVE TOUCH PANEL MARKET REPORT**

Annual comprehensive analysis of the technologies and trends that influence the adoption of touch panels in automobile designs worldwide. The report also includes a special analysis of the Japanese market and analyzes all aspects of current touch technologies, plus those being considered for future automotive applications. It includes market historical and forecast analyses by technology, sensor type, size, maker, and ASP.

#### Learn more

#### **TOUCH PANEL COVER GLASS REPORT**

Annual research on cover lens shipments for consumer applications, a 5-year forecast, and the results of cover lens material demand simulations. The report also reviews topics related to the cover lens industry including sapphire glass, plastics, and surface coating technologies. Thirty cost models with analysis are included, enabling subscribers to see the key elements that have an impact on the total cost of cover lenses common to the industry.



### **Touch & Interface Research Page**

## TOUCH PANEL OCA/OCR TECHNOLOGY & MARKET REPORT

Annual research on Optically Clear Resin (OCA) and Optically Clear Adhesives (OCA) for the touch panel market. Air gap vs. direct bonding, layer structure analysis of touch panel and market forecasts and technology issues of the OCA and OCR industry are key highlights of the coverage offered.

#### Learn more

## SMARTPHONE & TOUCH ECOSYSTEM REPORT - CHINA

Annual research on shipments for the top 10 Chinese smartphone brands, and touch panel supply chain information by brand, module maker share, sensor (layer) structure, and vertical integration. The report also analyzes the critical issues that the Chinese smartphone and touch panel industry are facing.

#### Learn more

## GESTURE SENSING CONTROL FOR SMART DEVICES REPORT

Annual analysis of the latest gesture-sensing control technologies and platforms with technical specifications and details. IHS examines almost all available gesture-sensing technologies in this report. Some of them are cost-effective, and some capable of depth sensing and machine vision.

#### Learn more

#### TOUCH USER INTERFACE REPORT

Annual report on the latest touch-related technical trends and their market forecast with insightful analysis. This report emphasizes touch controller ICs, growing and critical technical features which will be influential with future competition, features, and the supply chain.



### **Contact Us**

#### FOR MORE INFORMATION

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