



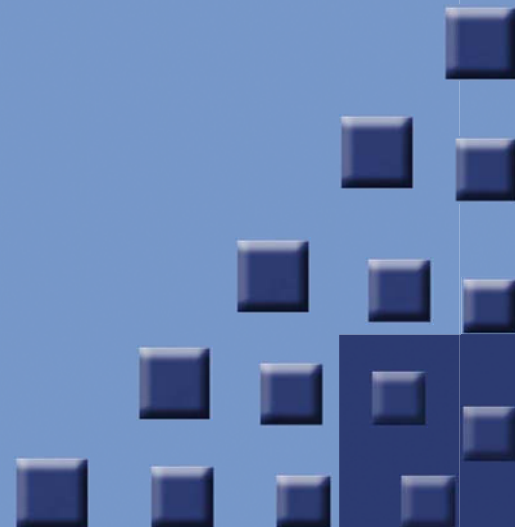
**FE Technology Inc.**

# ***Visual Solutions***

*Safety with intelligent cameras*

- HIGH EFFICIENT CAMERAS**
- Intelligent Detection
  - Super Hydrophilic Technology
  - 360 degree view + VDD

**Custom Designs**  
**Ultra Wide Viewing Angles**  
**Total Thermal Management**  
**High Quality, Heavy Duty**





# **FE Technology Inc.**

## **OEM Manufacturing Specialists**

FE Technology is an industry leader in the manufacturing, sales and distribution of camera lens. Our organization has over 20 years experience in serving the OEM manufacturers throughout the North American market. We offer the cost advantage of Far East manufacturing backed up with a highly competent local engineering, sales and distribution staff. In addition, our staff in Taiwan and China oversees the manufacturing and quality of your product daily. We are dedicated to establishing a customer/supplier partnership. We will use our resources to find the most economical solution to meet your requirement, offer the highest quality products, and offer the level of service required to fill your specific supplier needs.

**PRODUCTS:** We primarily manufacture custom Camera Lens to meet our customer's specific requirements. We work with our customers to establish specs that will meet the needs of their application and the environment in which it will be used. Our local engineering and sales staff will work with you every step of the way to achieve the most economical design. Once the specifications have been established, we will quote the tooling required to manufacture your product at the anticipated production rate. Our factory will build samples from the tooling for you to inspect, testing and approve the tooling sample. If required, we will work with you to make any tooling modifications required to insure the product reliability, meet all functional, and environmental requirements of the specific application.

**SHIPPING:** We currently offer two shipping points for JIT delivery - Ohio and California. We understand the importance of JIT scheduling and we are prepared to work with our customers on specific shipping and warehousing needs, as required. We can also ship direct from our China and Taiwan factories for those customers who require this service.

**QUALITY:** Our factory is ISO certified to ISO 9002. Our factory QA department is highly trained and prepared to offer any QA reports required from IQC through to Final QA. We understand the importance of the high quality required and expected by our customers. We place the highest priority on quality and insuring that you receive a quality product. In addition to our factory QA testing and procedures, we also do QA at our USA warehouse to doubly insure that nothing has been missed at the factory or insure that product has not been damaged while in transit from the Far East.

**SERVICE:** In today's market, service distinguishes the supplier who is truly an extension of your Engineering, Purchasing and Production departments. We recognize the necessity for service and are always available to provide this vital link.



**Sales & Engineering**  
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# INTELLIGENT CAMERA MODULE

## Around View Monitor System (AVMS)

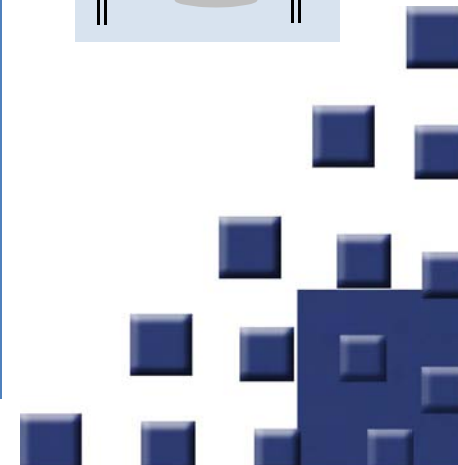
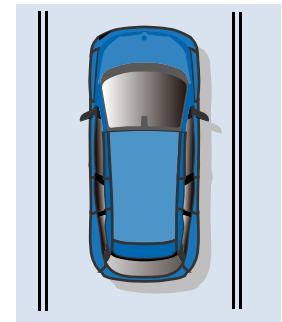
The AVMS is a real-time image processing algorithm using 4 HD 180 deg wide angle cameras with choice of LVDS or Ethernet AVB interface to provide 360 deg seamless surround view.

### 2D/3D AVMS System

#### Features:

1. Seamless 360 ° AVM
2. Auto Calibration (within 30 sec after calibration button)
3. Auto Correction on Color and Brightness
4. Real Time Calibration
5. Supports Recording Function
6. Product Interfaces:
  - 2D/3D 720p resolution LVDS Interface AVM
  - 2D/3D 720p resolution Ethernet Interface AVM

| Items                        | LVDS Camera<br>(Option 1) | Ethernet AVB<br>Camera (Option 2) |
|------------------------------|---------------------------|-----------------------------------|
| <b>Sensor Pixels Array</b>   | 1280(H) x 800(V)          | 1280(H) x 960(V)                  |
| <b>Power Supply</b>          | 5VDC 10%                  | +8VDC ~ +32VDC<br>(Typ.: +12VDC)  |
| <b>Maximum S/N Ratio</b>     | 41dB                      | 43.9dB                            |
| <b>Video Output Format</b>   | YUV422 10bit              | H.264/ MJPEG                      |
| <b>F No.</b>                 | 2.0                       | 2.1                               |
| <b>View Angle</b>            | H: 190°±3% ;<br>V:115°±3% | H: 180°±3% ;<br>V:120°±3%         |
| <b>Relative Illumination</b> | 50 %                      | 50 %                              |
| <b>Operation Temperature</b> | -40 ~ +85°C               | -40 ~ +85°C                       |
| <b>Storage Temperature</b>   | -40 ~ +105°C              | -40 ~ +105°C                      |
| <b>Dimension (mm)</b>        | 24*24*29<br>(W/O BKT)     | 35.1*35.1*51.6 ±0.2<br>(W/O BKT)  |
| <b>Waterproof Grade</b>      | IP69K                     | IP69K                             |





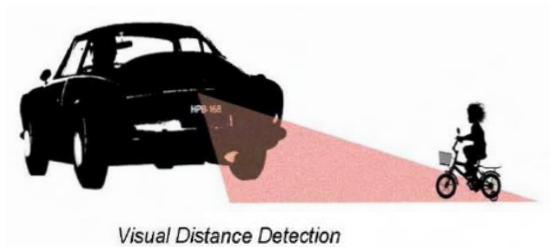
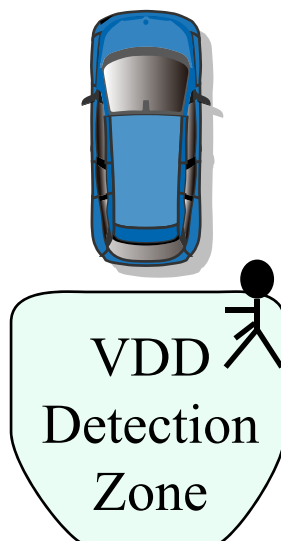
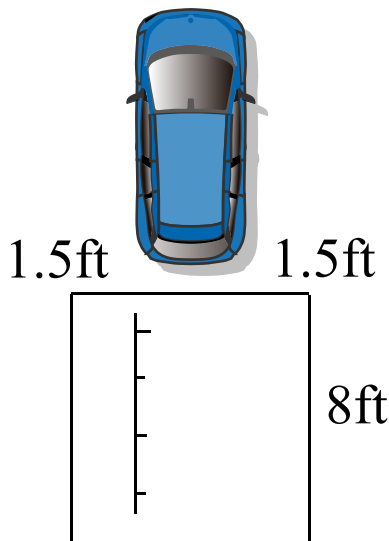
# INTELLIGENT CAMERA MODULE

## Visual Distance Detection (VDD)

The VDD technology uses one highly integrated camera to detect moving objects and calculate the object distance through real-time image processing. The system can detect multiple objects and display distance to the nearest one. With the integration of the added laser technology, the VDD camera is able to provide safety under low light environment.

| Items                  | LVDS Camera (Option 1)                            |
|------------------------|---|
| Vehicle Speed:         | < 3 mph   |
| VDD Region:            | 8in → 8ft with lateral 3ft terms of vehicle width |
| Object Minimum Height: | 11 inches   |
| Response Time :        | < 0.2 second                                      |
| VDD Limitation :       | Luminance >10 Lux                                 |
| Field of View :        | 140 Degree  |

1. Camera provides view and distance
2. No ultrasonic sensors
3. Multiple object tracking & Detection
4. Integrate VDD with Alarms





# LENS TECHNOLOGY

## Super Hydrophilic Coating Technology

Advanced coating prevents water droplets from forming, beading, or adhering onto the lens surface. This coating keeps the view clear and free from distracting debris.

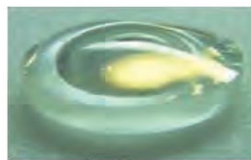
### Features:

1. Anti-fogging
2. Super hydrophilic coating technology
3. High adherence coating
4. Excellent stability and durability
5. Excellent anti-scratch performance

*Regular coated lens*      *Hydrophilic coated lens*  
*Water Droplets*



V.S.



| Camera with regular lens     | Camera with coated lens     |
|------------------------------|-----------------------------|
|                              |                             |
| Display image (regular lens) | Display image (coated lens) |
|                              |                             |



# PRODUCT PROFOLIOS

## Optical Products

- 195 dergee Ultra Wide Angle Lenses
- VGA to 5 Mega Pixel Lenses
- High Temperature Resistance Plastic Coated Lenses
- Functional Coatings - AR, Hydrophilic, Carbon



## Vehicle Camera Products

- Wide-Angle Vehicle Cameras
- HDR Vehicle Cameras
- AVMS Vehicle Cameras
- LVDS Mega-Pixel Vehicle Cameras
- Ethernet AVB Vehicle Cameras

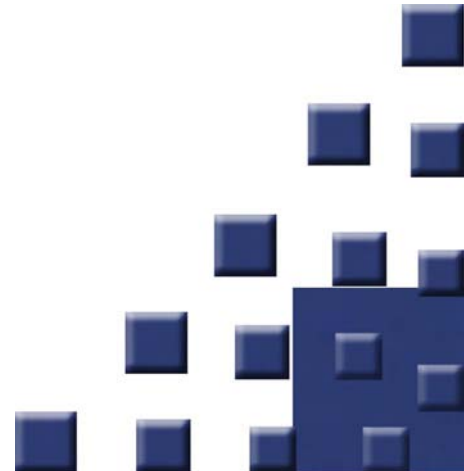


## Camera Module Products

- Intelligent Camera Modules
- ATM Camera Modules
- Door Phone Camera Modules
- IP-CAM Modules
- Home Appliance Camera Modules



## ODM Camera module





# VEHICLE CAMERAS

## VP2231 Heavy Duty IR-LED Camera for Bus RVC or DVR Applications

### **Specification:**

- 1/3.6" CMOS Sensor
- **PAL output**, NTSC model available
- FOV (H)135°; (V) 98°
- Lens: 5G+IR, F=2.0
- Dynamic Range: 74.8dB
- Low-Light: 50 IRE/0.5Lux
- IR-LED: 4 High Power LED (Optional)
- Water-Proof: IP68
- Operating Temp: -25 °C~+75 °C
- IR Filter: Visible & 850 nm
- Dimension(mm): 43\*39\*41.01 (L\*W\*H)



## VN2259 High Quality Rearview Camera

### **Specification:**

- 1/3.6" CMOS Sensor
- NTSC Output
- FOV (H): 142°, (V):118°
- Lens: 2G2P+IR, F=2.2
- Dynamic Range: 71dB
- Low-Light: 50IRE/0.5Lux
- Water-Proof: IP68
- Operating Temp.: -40 °C~85 °C
- Dimension(mm): 23.7 x 23.7 x 24.81 (L\*W\*H)





# FE Technology Inc.

Ready to serve OEM/ODM Customers throughout the USA. We are the choice of many large and small OEM factories.

**EXPERIENCE:** 20 years serving the USA market

**RESPONSIVE:** We can review and respond to your specs, sometimes overnight. We can expedite manufacturing and shipment of your products.

**QUALITY:** With our highly trained factory staff and local QC and QA, we doubly insure the quality of the product you receive.

**SERVICE:** In today's market, service distinguishes the supplier who is truly an extension of your Engineering, Purchasing and Production departments. Our goal is to be an integral part of your organization and be considered an "external, but connected, function" of your company.

## OTHER PRODUCTS FROM FE TECHNOLOGY

|                    |                                      |
|--------------------|--------------------------------------|
| POWER ADAPTERS     | AC/DC AC/AC Switching Smart Chargers |
| POWER SUPPLIES     | Desk Top Wall Mount Open Frame       |
| CUSTOM OEM CABLES  | Molded Assembled OBD USB 1394        |
| CUSTOM HARNESSES   | Built to customer specifications     |
| ANTENNAS           | Molded Steel PCB Ceramic             |
| CUSTOM KEYPADS     | Rubber Silicone Membrane             |
| TELCO PRODUCTS     | Jacks Cords CAT5 CAT6                |
| PCB ASSEMBLY       | Design Layout SMT Thru-hole          |
| TURNKEY PRODUCTION | Concept to Large Scale Production    |

Sales & Engineering

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