VIVOTEK’s FD816CA-HF2 is an ultra-mini, recessed-mount fixed dome network camera, offering superb image quality up to 30 fps at 2-Megapixel resolution. Due to its compact design (only 60mm in diameter), the camera is able to blend into any indoor surveillance space such as retail, banks, restaurants, offices and other public areas.

Featuring VIVOTEK’s WDR Pro and SNV technology, the FD816CA-HF2 provides superior visibility in high-contrast lighting environments and high-quality full-color surveillance video even under low-light conditions. Armed with VIVOTEK’s sophisticated Smart Stream II technology, the camera optimizes image quality for desired regions, and thus ensuring maximum efficiency of bandwidth usage and savings of up to 50% on bandwidth and storage requirements.

As an all-in-one camera, the FD816CA-HF2 is designed for easy installation with PoE power, making setup both quick and simple. The camera is also completely compatible with VIVOTEK’s VAST free 32-channel recording software. With all of these benefits and more, the FD816CA-HF2 will fulfill your surveillance needs.

Key Features
- 2-Megapixel CMOS Sensor
- 30 fps @ 1920 x 1080
- Real-time H.264 and MJPEG Compression (Dual Codec)
- WDR Pro (100dB) to Provide Extreme Visibility in High Light Contrast Scenes
- SNV (Supreme Night Visibility)
- Smart Stream II to Optimize Bandwidth Efficiency
- 3D Noise Reduction for Low-light Conditions
- 70° Tilt Lens
- Built-in IEEE 802.3af Compliant PoE
- Built-in MicroSD/SDHC/SDXC Card Slot for On-board Storage
- Trend Micro IoT Security within Standard Warranty Period
**Technical Specifications**

**Model**
FD816CA-HF2

**System Information**

- **CPU**
  Multimedia SoC (System-on-Chip)
- **Flash**
  128MB
- **RAM**
  256MB

**Camera Features**

- **Image Sensor**
  1/2.7” Progressive CMOS
- **Maximum Resolution**
  1920x1080 (2MP)
- **Lens Type**
  Fixed-focal
- **Focal Length**
  \( f = 2.8 \text{ mm} \)
- **Aperture**
  F1.8
- **Field of View**
  122° (Horizontal)
  66° (Vertical)
  142° (Diagonal)
- **Shutter Time**
  1/5 sec. to 1/32,000 sec.
- **WDR Technology**
  WDR Pro
- **Minimum Illumination**
  0.15 Lux @ F1.8 (Color)
  < 0.01 Lux @ F1.8 (B/W)
- **Pan/Tilt/Zoom Functionalities**
  ePTZ: 4x digital zoom IE plug-in
- **On-board Storage**
  Slot type: MicroSD/SDHC/SDXC card slot Seamless Recording

**Video**

- **Compression**
  H.264 & MJPEG
- **Maximum Frame Rate**
  30 fps @ 1920x1080
- **Maximum Streams**
  3 simultaneous streams
- **S/N Ratio**
  66 dB
- **Dynamic Range**
  100 dB
- **Video Streaming**
  Adjustable resolution, quality and bitrate; Smart Stream II
- **Image Settings**
  Adjustable image size, quality and bit rate; Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks; Scheduled profile settings; 3DNR

**Audio**

- **Audio Capability**
  One-way Audio
- **Compression**
  G.711, G.726
- **Interface**
  Built-in Microphone
- **Effective Range**
  5 Meters

**Network**

- **Users**
  Live viewing for up to 10 clients
- **Protocols**
  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPoE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, CIFS/ SMB

**Interface**

10Base-T/100 BaseTX Ethernet (RJ-45)

*It is highly recommended to use standard Cat. 5e & Cat. 6 cables which are compliant with the 3P/ETL standard.

**ONVIF**

Supported, specification available at www.onvif.org

**Intelligent Video**

**Video Motion Detection**
Five-window video motion detection

**Alarm and Event**

- **Alarm Triggers**
  Motion detection, manual trigger, periodical trigger, system boot, recording notification, camera tampering detection, audio detection
- **Alarm Events**
  Event notification using HTTP, SMTP, FTP, NAS server and MicroSD Card
  File upload via HTTP, SMTP, FTP, NAS server and MicroSD card

**General**

- **Connectors**
  RJ-45 for Network/PoE connection
- **LED Indicator**
  System power and status indicator
- **Power Input**
  IEEE 802.3af PoE Class 2
- **Power Consumption**
  Max. 3.3 W
- **Dimensions**
  Ø 60 x 115 mm
- **Weight**
  Net: 138 g
- **Safety Certifications**
  CE, LVD, FCC Class B, VCCI, C-Tick, UL
- **Operating Temperature**
  Starting Temperature:
  0°C ~ 45°C (32°F~ 113°F)
  Working Temperature:
  -10°C ~ 45°C (14°F~ 113°F)
- **Warranty**
  24 months

**System Requirements**

- **Operating System**
  Microsoft Windows 8/7
- **Web Browser**
  Internet Explorer 10/11
- **Other Players**
  VLC: 1.1.11 or above
  QuickTime: 7 or above

**Included Accessories**

- **Others**
  Quick installation guide

**Dimensions**

![Dimensions Diagram]

**Compatible Accessories**

<table>
<thead>
<tr>
<th>Mounting Kits</th>
<th>Dome Covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM-526</td>
<td>AC-227</td>
</tr>
<tr>
<td>Pendant mount adapter for 3/4” NPT Pipe</td>
<td>Transparent Cover (Plastic Case)</td>
</tr>
<tr>
<td></td>
<td>AC-229</td>
</tr>
<tr>
<td></td>
<td>Transparent Cover (K10 Case)</td>
</tr>
</tbody>
</table>

All specifications are subject to change without notice. Copyright © VIVOTEK INC. All rights reserved. Ver. 6