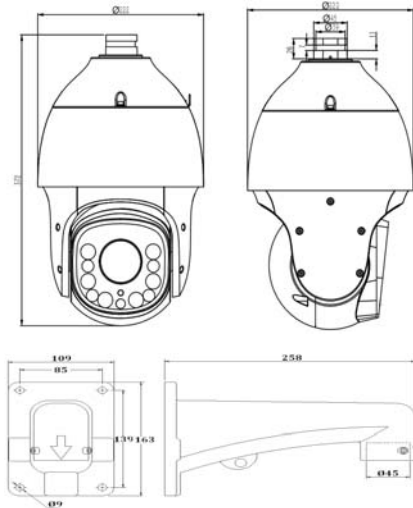




### Features

- Ultra Low Light 0.002lux
- H.265 Codec
- Up to 1920X1080 High Resolution
- Smart IR, IR Range: 180~200m
- Speed Max 400°/s, -16~90° Tilt Angle
- Optical Zoom: 33x, Digital Zoom: 16x
- NIR, WDR, 3D DNR, HLC, Dual-ICR, AWB, AGC, BLC
- Triple Streams
- MicroSD Card Slot, up to 128GB
- Tripwire Detection
- Perimeter Detection
- Smart Defog
- TVS 6000V, Lightning/Surge 4000V Protection
- Temperature: -40°C~70°C
- CE, FCC

### Dimensions



### Dimensions(Optional)

Model: DF20

DF21



<b>Camera</b>	
Image Sensor	1/2.8" Sony Progressive Scan CMOS
Effective Pixels	1280(H)x1080(V)
Signal System	PAL/NTSC
Minimum Illumination	Color:0.002Lux@ (F1.6,50 IRE,ICR OFF) Black&White:0.001Lux@ (F1.6,50 IRE, ICR ON) / 0 Lux with IR
White Balance	Auto/ ATW/ Manual
AGC	Auto/Manual
S/N Ratio	≥ 55dB
BLC	Y
HLC	Y
Smart Defog	Y
WDR	100dB
Digital Noise Reduction	3D DNR
Exposure Mode	Auto/ Manual/Shutter priority/ Aperture priority
Shutter Time	1/1s ~ 1/100000s
Day& Night	IR Cut Filter with Auto Switch
Digital Zoom	16x
Privacy Masking	24 Dynamic Privacy Mask Programmable; Optional Multiple Colors
Auto Focus	Auto/ Semi-automatic/ Manual
OSD	16*16,32*32,24*24,48*48,64*64,96*96 Character Size Time/Date/Week/Character Superposition in 5 Regions / PTZ Angle Superposition
<b>Lens</b>	
Focal Length	4.6-152mm, 33x
Zoom Speed	Approx.5s(Optical Wide-Tele)
Angle of View	67.9°(w)~2.18°(t)
Minimum Working Distance	1-1.5m(Wide-Tele)
Aperture Range	F1.6-F4.8
<b>Pan &amp; Tilt</b>	
Pan Range	360° Endless
Pan Speed	Pan Manual Speed: 0.1°~400°/s Pan Preset Speed: 400°/s
Preset Accuracy	±0.2°
Tilt Range	-16°~90° (Auto Flip )
Tilt Speed	Tilt Manual Speed: 0.1°~120°/s Tilt Preset Speed: 180°/s
Proportional Zoom	Rotation Speed Can Be Adjusted Automatically According to Zoom Multiples
3D Position	Y
Number of Preset	500
Scan	8
Cruise	8, up to 32 Presets per Cruise
Pattern	8, Each One With 600s Memory or 300 Orders
Power loss recovery	Y
Guard Action	Preset/ Cruise/ Pattern/ Scan
PTZ Position Display	Y
Freeze Frame	Y
RS-485 Protocols	PTZ_PELCO_D,PTZ_PELCO_P,PTZ_TC615_P,DOME_PELCO_D,DOME_PELCO_P,DOME_PLUS
<b>Infrared</b>	
IR Irradiation Distance	180m~200m
IR Irradiation Angle	Adjustable by Zoom
<b>Interface</b>	
Audio Input	1-ch Mic in(Line in Interface) / Line Input 2-2.4V[p-p]; Output Impedance 1KΩ, ±10%
Audio Output	1-ch, Line level, Impedance: 600Ω
Ethernet	1-ch RJ45 10M/100M
Alarm Input	1-ch
Alarm Output	1-ch
On-board Storage	MicroSD Card Slot, up to 128GB
BNC Output & RS485	N/A
Extension	N/A
<b>Network</b>	
Ethernet	10Base-T/100Base-TX RJ45 Connector
Max.Image Resolution	1920×1080
Main Stream	1920×1080@25/30fps; 1280×960@25/30fps; 1280×720@25/30fps;1280×720@50/60fps 704×576@25/30fps;704×480@50/60fps
Sub Stream	704×576@25fps/704×480@30fps; 352×288@25fps/352×240@30fps; 176×144@25fps/176×120@30fps
Third Stream	352×288@25fps/352×240@30fps
Image Compression	H.265/H.264 High Profile/MJPEG
ROI Encoding	7 Areas for Both Main and Sub Stream
Audio Compression	G711/AG711/ADPCM/AAC
Audio Bit Rate	8K~48Kbps
Video Bit Rate	32K~1600Kbps
Protocols	TCP/UDP/HTTP/MULTICAST/UPnP/DHCP/PPPoE/DDNS/NFS/FTP/NTP/RTP/RTSP/IPv6/SNMP/SMP
Remote Connection	10 Users Access at the Same Time
User Permission	Up to 32 Users, 4 Levels User Authentication (ID and PW), Host Authentication (MAC Address) IP Address Filtering
Security Measures	
Web Browser	IE8,IE9,IE10,Chrome8+,Firefox3.5+
System Compatibility	ONVIF (Profile S), SDK, CGI
<b>Advance</b>	
Video Analytics	Tripwire, Perimeter, Loitering/Crowd/Parking Detection, Missing/Foreign Object, Face Detection
Intelligent Alarm	Harsh Voice Alarm, Motion Ddetection, Mask Alarm, Port Alarm,Network Disable Alarm, IP Conflict, MAC Conflict Detection,unusual Image, scene changing, mic offline.
<b>General</b>	
Language	English, Spanish, Korean, Italian,Turkish,Thai, Russian, Traditional Chinese.
Operating Conditions	-40°C~70°C, 0 ~ 95% RHG
Power Supply	AC24V/3A
Power Consumption	18.6W(IR OFF) 32.36W(IR ON )
Circuit Protection	TVS 6000V, Lightning/ Surge 4000V Protection
Impact Protection	IP66
Wiper	N/A
IR LEDs	10pcs
Dimensions	222mm×222mm×372mm
Weight	5KG (IP PTZ Only), 8.45KG (with Packing Box)

\* The latest product information / specification can be found at <http://en.tiandy.com/>

