TNU-6320E

2M H.264 Explosion-proof Camera



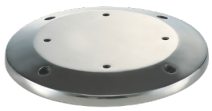
Key Features

- Max. 2megapixel (1920 x 1080) resolution
- Max. 60fps@2M all resolutions
- 4.44 ~ 142.6mm (32x) optical zoom, 16x digital zoom
- 0.15Lux@F1.6(color), 0.015Lux@F1.6(B/W)
- H.264, MJPEG dual codec, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Pan/Tilt : 50˚/sec (Preset), Endless rotation, 255 preset
- Face detection, Tampering, Virtual line support
- Explosion-proof certificate
  : CE2460 EX II 2 GD Ex d IIC T6 Gb IP67 Ex tb IIIC T80°C Db

Accessories (Optional)



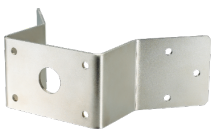
SBE-100WM



SBE-100B



SBE-100PM



SBE-100CM

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Video	
Imaging Device	1/2.8" 2MP CMOS
Effective Pixels	1944(H)x1104(V)
Min. Illumination	Color: 0.15Lux(F1.6, 1/30sec) B/W: 0.015Lux(F1.6, 1/30sec)
Lens	
Focal Length (Zoom Ratio)	4.44~142.6mm(32x) zoom
Max. Aperture Ratio	F1.6 (Wide)~F4.4 (Tele)
Min. Object Distance	1.5m(59.06ft)
Focus Control	Oneshot AF
Lens Type	DC auto iris
Pan / Tilt / Rotate	
Pan Range	360˚ Endless
Pan Speed	Preset: 50˚/sec, Manual: 0.1˚/sec ~ 40˚/sec
Tilt Range	180˚(-90˚~90˚)
Tilt Speed	Preset: 50˚/sec, Manual: 0.1˚/sec ~ 40˚/sec
Sequence	Preset(255ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule
Preset Accuracy	±0.2˚
Azimuth	Support
Operational	
Camera Title	Displayed up to 45 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNRⅢ
Digital Image Stabilization	Support
Defog	Support
Motion Detection	4ea, rectangular zone
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2~1/12,000sec)
Analytics	Face detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line
Alarm I/O	Input 1ea / Output 1ea
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	File upload via FTP and e-mail Notification via e-mail NAS recording at event triggers Alarm output
Wiper	Support
Network	
Ethernet	RJ-45(10/100BASE-T)

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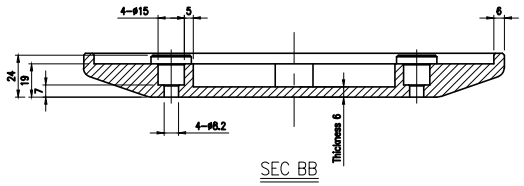
Video Compression	H.264: Main/Baseline/High, MJPEG
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.264: Max. 60fps/50fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(60Hz/50Hz)
Smart Codec	Manual(5ea area)
Bitrate Control	H.264: CBR or VBR MJPEG: VBR
Streaming	Unicast(10 users) / Multicast Multiple streaming(Up to 10 profiles)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access Log 802.1X Authentication(EAP-TLS, EAP-LEAP)
Application Programming Interface	ONVIF Profile S SUNAPI (HTTP API) SVNP 1.2 Wisenet open platform
Web Viewer	Supported OS: Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Recommended Browser: Google Chrome Supported Browser: MS Explore11,~MS Edge, Mozilla Firefox(Window 64bit only), Apple Safari(Mac OS X only)
Memory	512MB RAM, 128MB Flash
Environmental	
Operating Temperature / Humidity	-40°C~+60°C (-40°F~+140°F) / Less than 90% RH * Start up should be done at above -30°C
Storage Temperature / Humidity	-30°C~+60°C (-22°F~+140°F) / Less than 90% RH
Certification	IP67, IK10 CE2460, EX II 2 GD, Ex d IIC T6 Gb IP67 Ex tb IIIC T80°C Db
Electrical	
Input Voltage	24VAC
Power Consumption	24VAC: Max 49W
Mechanical	
Color / Material	Silver / Stainless(SUS316L)

- The lastest product information / specification can be found at hanwha-security.com
- Design and specifications are subject to change without notice.
- Wisenet is the proprietary brand of Hanwha Techwin , formerly known as Samsung Techwin.

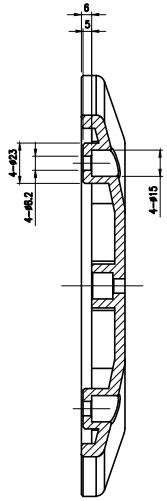
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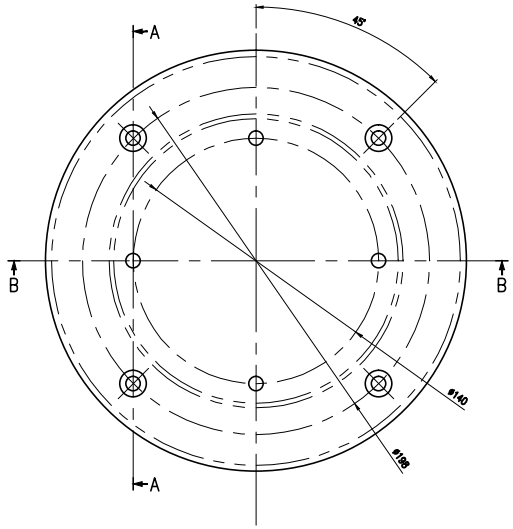
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2					

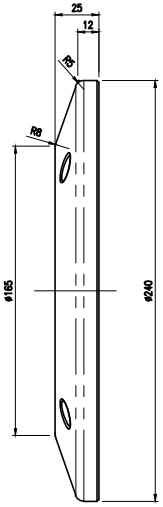


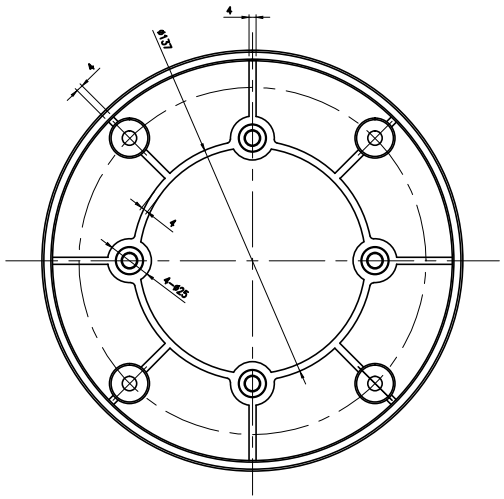
SEC BB



SEC AA







출도		
	외주제작용	
	개 발 용	
	승 인 용	
	양 산 용	■
원우이엔지 2016.11.09		

NOTE.
1. THE BASIS OF ASSESSMENT OF APPEARANCE IS APPROVAL SAMPLE.
2. MANUFACTURER MUST PRODUCE MASS PRODUCTION AFTER A DESIGNER'S APPROVAL.
3. IF THIS PART IS APPLIED TO The RoHS, MUST USE ONLY THE MATERIAL WHICH PASSED THE BODY BURDEN TEST OF A QUALIFIED TEST LAB.
4. THE DIMENSION WHICH IS OMITTED IN THIS DRAWING REFERS TO THE 3D DATA.
5. MUST CHECK THE "*" DIMENSION PERIODICALLY.
6. THE SURFACE FINISHED SPECIFICATION MUST BE COMPLIED.
7. AFTER ASSEMBLY, THE VISIBLE SURFACE MUST BE MIRROR BUFFING.
8. DO HAVE LESS THAN R0.5 ON ALL ROUND THAT ARE NOT SPECIFIED.
9. DO HAVE LESS THAN C0.5 ON ALL CHAMFER THAT ARE NOT SPECIFIED.
10. BURR ON THE EDGE MUST BE MINIMIZED.
11. ⬡ II 2 GD, Ex d IIC Gb T6, -40°C≤Ta≤+60°C, IP67
Ex tb IIIC Db T(80°C)

General tolerance that are not specified			
DIM'S \ GRADE	A	B	C
1-4 MAX.	±0.05	±0.10	±0.25
4-16	±0.07	±0.20	±0.55
16-63	±0.10	±0.30	±0.50
63-250	±0.18	±0.55	±0.90
250-500	±0.25	±0.90	±1.50
500-1000	±0.40	±1.50	±2.50

NO.	TITLE	DWG. NO.	MATERIAL	FINISH	REMARK
	APPROVED	S.G.LEE	MATERIAL	MODEL	EXP SERIES
	CHECKED		SUS316L	TITLE	PEDESTAL
	DESIGN	C.H.CHA	FINISH	DWG. NO.	344062A06Z Rev.01
	DRAWN		MIRROR BUFFING	REF. NO.	
			SCALE 1/2	DATE 13.12.12	SHEET 1 OF 1

goodsms WONWOO ENG.

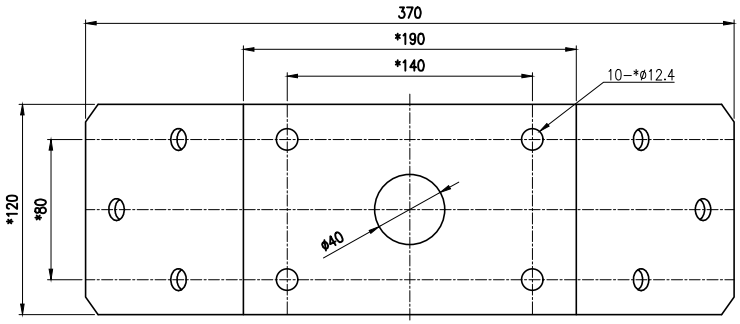
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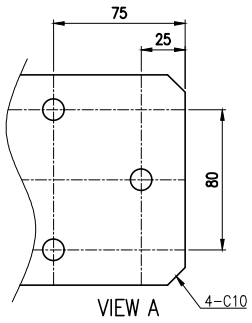
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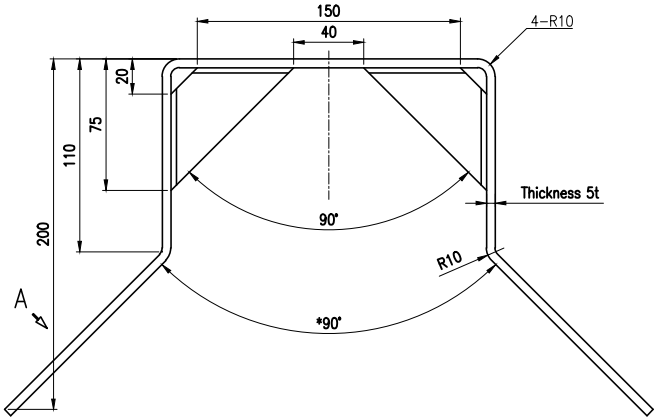
08-2019

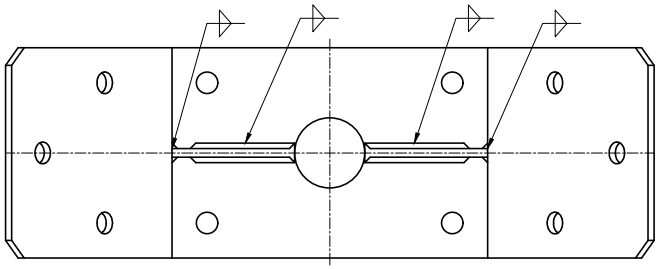
결재	외주제작용
	개 발 용
	승 인 용
	양 산 용
원우이엔지 2016.11.09	

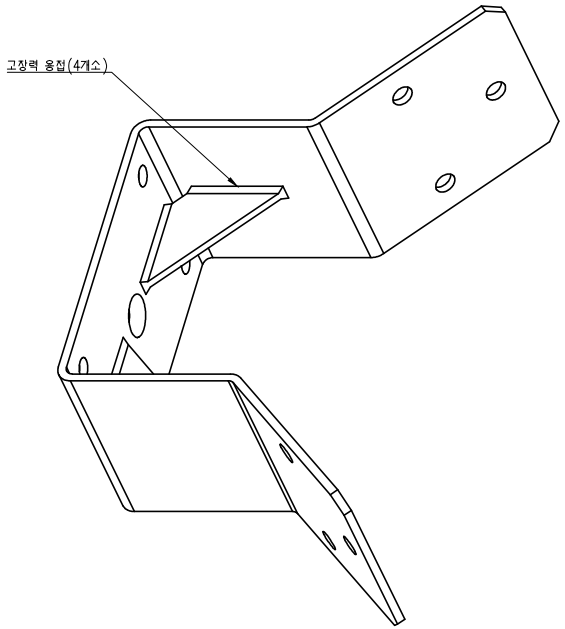
REV	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR
1					
2					











NOTE.
1. MUST CHECK THE "*" DIMENSION PERIODICALLY.
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도면에 지정되지 않는 일반공차

DIM'S \ GRADE	A	B	C
1-4 MAX.	±0.05	±0.10	±0.25
4-16	±0.07	±0.20	±0.35
16-63	±0.10	±0.30	±0.50
63-250	±0.18	±0.55	±0.90
250-500	±0.30	±0.90	±1.50
500-1000	±0.50	±1.50	±2.50

APPROVED	G.S.KIM	MATERIAL	MODEL	TNU/TNO-6320E	
CHECKED		SUS304	TITLE	CORNER BRACKET	
DESIGN	D.Y.HAM	FINISH	DWG. NO.	316062A40	Rev.0
DRAWN		Ni Plating	REF. NO.	-	
		SCALE 1/1	DATE 2016.06.21	SHEET 1 OF 1	

WONWOO ENG.

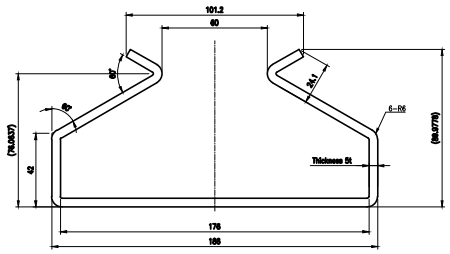
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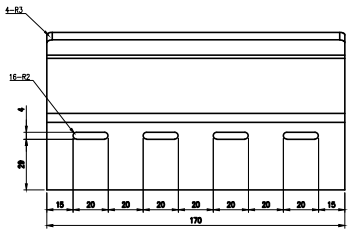
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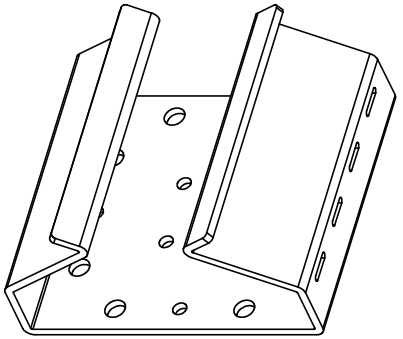
결재	외주제작용
	개 발 용
	승 인 용
서	양 산 용

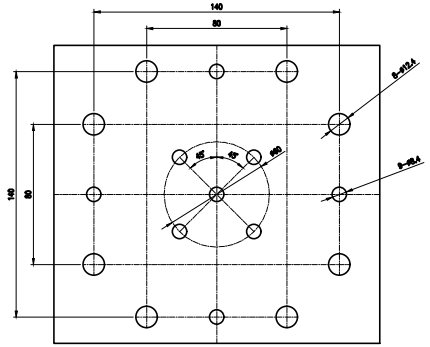
원우이엔지
2016.11.09

REV	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR
1					
2					









NOTE.
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4. DO HAVE LESS THAN R0.5 ON ALL ROUND THAT ARE NOT SPECIFIED.
5. DO HAVE LESS THAN C0.5 ON ALL CHAMFER THAT ARE NOT SPECIFIED.
6. BURR ON THE EDGE MUST BE MINIMIZED.

도면에 지정되지 않는 일반공차			
DIM'S \ GRADE	A	B	C
1-4 MAX.	±0.05	±0.10	±0.25
4-16	±0.07	±0.20	±0.35
16-63	±0.10	±0.30	±0.50
63-250	±0.18	±0.55	±0.90
250-500	±0.30	±0.90	±1.50
500-1000	±0.50	±1.50	±2.50

goodone WONWOO ENG.	APPROVED	G.S.KIM	MATERIAL	MODEL	POLE BRACKET
	CHECKED		SUS304	TITLE	–
	DESIGN	D.Y.HAM	FINISH	DWG. NO.	316062A30 Rev.0
	DRAWN		Ni Plating	REF. NO.	–
			SCALE 1/1	DATE 2016.06.21	SHEET 1 OF 1

A2(594mm X 420mm)

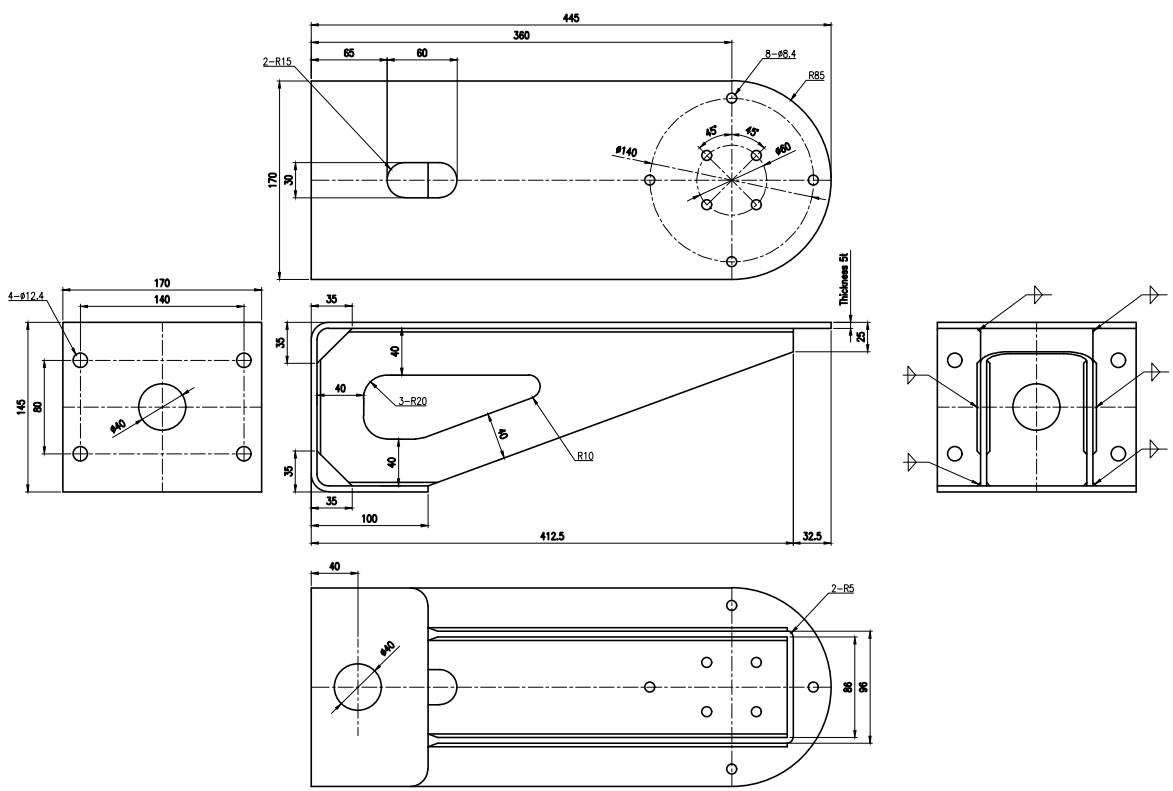
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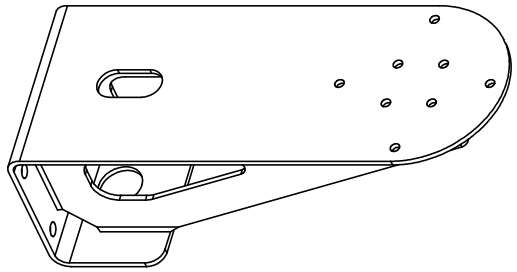
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출도	
외주제작용	
개 발 용	
승 인 용	
양 산 용	■

원우이엔지
2016.11.09

REV	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR
1					
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250-500	±0.30	±0.90	±1.50
500-1000	±0.50	±1.50	±2.50

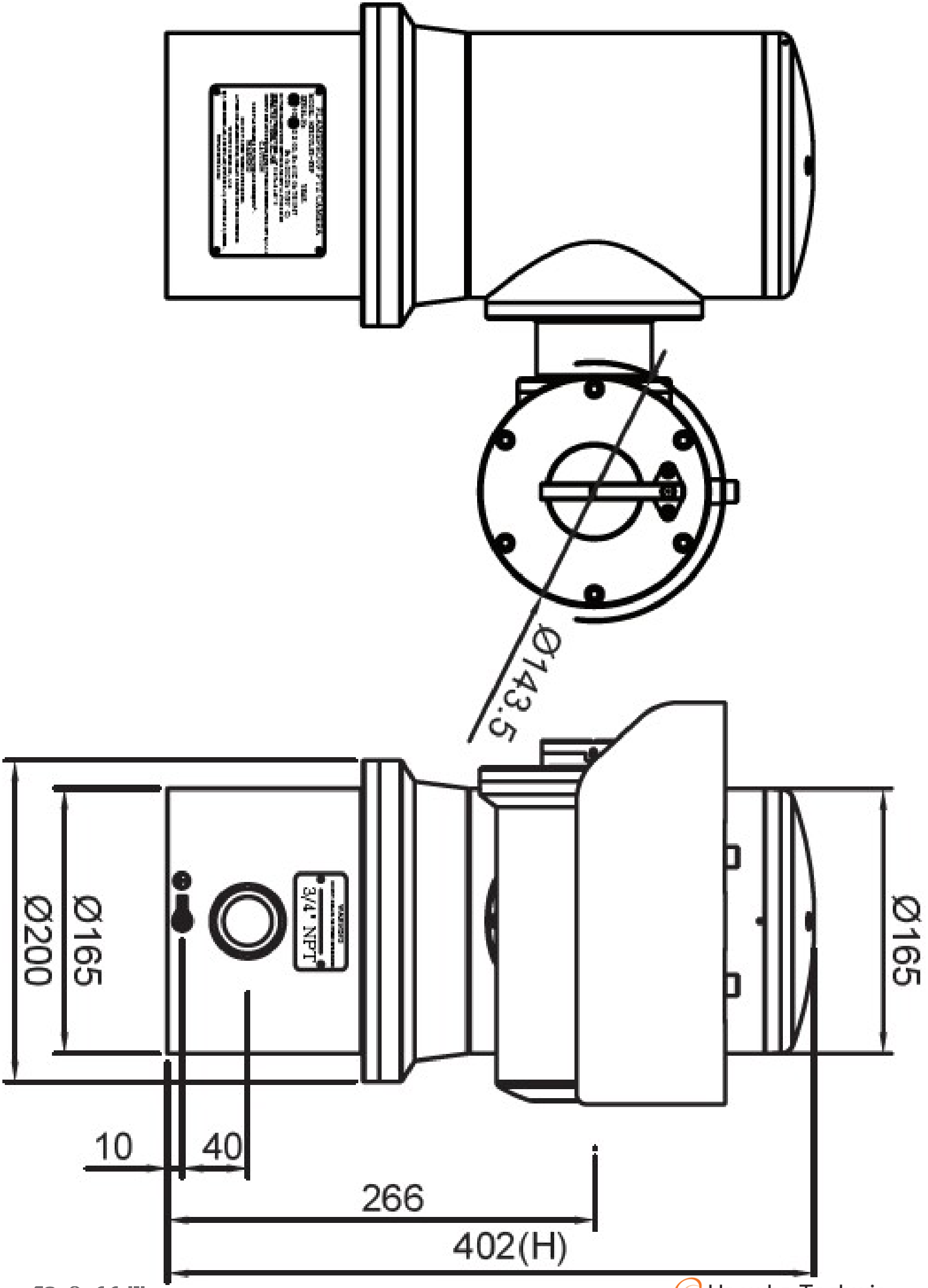
goodsome
WONWOO ENG.

APPROVED	G.S.KIM	MATERIAL	MODEL	TNU/TNO-6320E	
CHECKED		SUS304	TITLE	WALL BRACKET	
DESIGN	D.Y.HAM	FINISH	DWG. NO.	316062A00	Rev.0
DRAWN		Ni Plating	REF. NO.	-	
		SCALE 1/1	DATE 2016.09.06	SHEET 1 OF 1	

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