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The following material resulting from the investigation under the above numbers is enclosed.

Issue

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	X1		Index Page(s)	
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<u>Product Type</u>	<u>Model/Type Reference</u>	<u>Report Reference #</u>	<u>Status</u>
Digital Video Recorder	SVR-430	E158873-A2-UL	
Video Presenter	UF-80, UF-80DX, UF-80ST	E158873-A4-UL	
Video Presenter	SVP-5300N	E158873-A5-UL	
Video Presenter	SDP-900DXAN, SDP-950DXAN, SDP-950STAN	E158873-A6-UL	
Video Presenter	SDP-850, SDP-850DX	E158873-A9-UL	
Digital Video Recorder	SVR-1650, SVR-1650E, SVR-1640, SVR-1640E, SVR-950, SVR-950E and SVR-1640A	E158873-A11-UL	
Video Presenter	SDP-6500DXA	E158873-A12-UL	
Video Presenter	UF-130DX	E158873-A14-UL	
Video Presenter	UF-130ST	E158873-A15-UL	
Network Video Recorder	SNR-6400, SNR-3200, SRN-3250, SRN-6450	E158873-A16-UL	
Digital Video Recorder.	SVR-480	E158873-A17-UL	Withdrawn
Video Presenter	SDP-860	E158873-A18-UL	
Digital Video Recorder.	SVR-1670	E158873-A19-UL	
UTP Power Supply Unit	SPU-400	E158873-A20-UL	Withdrawn
Digital Presenter	SDP-760	E158873-A44-UL	
Network Camera	SNP-5300H*, SNP-6201H* (* is Blank or N or P: N = NTSC, P=PAL)	E158873-A45-UL	
Network Camera	SND-7011*, SND-5011*, SND-5061*, SND-7061*, SNV-5010*, SNZ-5200* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A46-UL	
Network Camera	SNP-5300*, SNP-6201* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A47-UL	
Digital Color Camera	SCP-3371H*, SCP-2371H*, SCP-2271H*, SCP-2373H*, SCP-2273H* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A48-UL	
Digital Color Camera	SCP-3371*, SCP-2371*, SCP-2271*, SCP-2373*, SCP-2273* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A49-UL	
Network Camera	SND-7082*, SND-7082F*, SNV-7082* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A50-UL	
Network Camera	SNB-7001*, SNB-5001*, SNB-3002* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A51-UL	
Network Camera	SNO-7082R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A52-UL	
Network Camera	SNB-7002* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A53-UL	

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DIGITAL COLOR CAMERA	SCV-2010F*, SCD-1020R*, SCD-2080R*, SCD-2020R*, SCD-2010*, SCD-2010B*, SCD-2010F*, SCB-3020*, SCB-3021*, SCB-2010*, SCO-1020R* (* is blank or N or P: N=NTSC, P=PAL)	E158873-A54-UL	
Network Camera	SNB-6004*, SNB-6003*, SNB-5004*, SNB-5003*, SNB-7004*, SNB-6005* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A55-UL	
Network Camera	SND-6084*, SND-6083*, SND-5084*, SND-5083*, SND-7084* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A56-UL	
DIGITAL COLOR CAMERA	SCD-2022*, SCD-2022R*, SCD-2042R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A58-UL	
Digital Color Camera	SCB-2004*, SCB-2005* (* is blank or N or P: N = NTSC, P=PAL);	E158873-A59-UL	
Digital Color Camera	SCD-2082*, SCV-2082R*, SCV-3083*, SCD-3083* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A60-UL	
Network Camera	SND-6084R*, SND-7084R*, SND-5084R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A61-UL	
NETWORK CAMERA	SNO-6084R*. SNO-7084R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A62-UL	
Network Camera	SNV-6084R*, SNV-6084*, SNV-5084*, SNV-7084*, SNV-7084R*, SNV-5084R*, SNV-6084T* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A63-UL	
Digital Color Camera	SCO-2081R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A64-UL	
DIGITAL COLOR CAMERA	SCB-2004*D, SCB-2005*D (* is blank or N or P: N = NTSC, P=PAL)	E158873-A65-UL	
DIGITAL VIDEO RECORDER	SRD-1673D*, SRD-1654D*, SRD-854D*, SRD-852D*, SRD-1673*, SRD-1653*, SRD-873*, SRD-1640*, SRD-840*(* is blank or N or P, N=NTSC / P=PAL)	E158873-A66-UL	
Network Camera	SNP-6200RH*, SCP-2370RH* (* is blank or N or P: N=NTSC,P=PAL)	E158873-A67-UL	
Network Camera	SNV-6012M* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A68-UL	
Network Camera	SNF-7010*, SNF-7010V*, SNF-7010VM* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A69-UL	
Network Camera	SNO-6011R* (* is blank or N or	E158873-A72-UL	

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	P: N = NTSC, P=PAL)		
Network Camera	SND-6011R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A73-UL	
Digital Video Recorder	SRD-1680D*, SRD-880D* (* is blank or N or P : N=NTSC, P=PAL)	E158873-A74-UL	
DIGITAL COLOR CAMERA	SCZ-2373*, SCZ-2273* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A75-UL	
NETWORK CAMERA	SCO-6081R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A76-UL	
DIGITAL COLOR CAMERA	SCV-6081R* and SCD-6081R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A77-UL	
NETWORK VIDEO RECORDER	SRN-4000	E158873-A78-UL	
DIGITAL COLOR CAMERA	SCD-6021* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A81-UL	
NETWORK CAMERA	SNV-6013* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A83-UL	
NETWORK CAMERA	SNB-6010*, SNB-6010A*, SNB-6011*, SNB-6010B*, SNB-6011B* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A85-UL	
NETWORK CAMERA	SNP-6320H*, SNP-5430H* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A86-UL	
NETWORK CAMERA	SNP-6320*, SNP-5430* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A87-UL	
Network Video Recorder	SRN-472S, XRN-810S* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A88-UL	
Digital Video Recorder	SRD-1676D*, SRD-1656D*, SRD-876D* (* is blank or N or P, N=NTSC/ P=PAL)	E158873-A89-UL	
DIGITAL COLOR CAMERA	SCB-5000* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A90-UL	
DIGITAL COLOR CAMERA	SCB-5000*D (* is blank or N or P: N = NTSC, P=PAL)	E158873-A91-UL	
DIGITAL COLOR CAMERA	SCD-5080* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A92-UL	
DIGITAL COLOR CAMERA	SCB-5003*, SCB-5005*, HCB-6001* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A94-UL	
DIGITAL COLOR CAMERA	SCV-5082* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A95-UL	
DIGITAL COLOR CAMERA	SCD-5083*, SCD-5083R*, SCD-5082*, SCD-5083B*, SCD-5081R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A96-UL	
DIGITAL COLOR CAMERA	SCV-5083* (* is blank or N or P: N = NTSC, P=PAL) SCV-5083R* (* is blank or N or	E158873-A97-UL	

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	P: N = NTSC, P=PAL) SCV-5081R* (* is blank or N or P: N = NTSC, P=PAL)		
NETWORK CAMERA	SNF-8010VM*, SNF-8010* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A98-UL	
DIGITAL COLOR CAMERA	SCD-5030*, SCD-5020* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A99-UL	
NETWORK CAMERA	SNO-5084R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A100-UL	
DIGITAL COLOR CAMERA	SCO-5083R*, SCO-5081R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A101-UL	
NETWORK CAMERA	SNP-6321*, SNP-L6233* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A102-UL	
NETWORK CAMERA	SNP-6321H*, SNP-L6233H* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A103-UL	
DIGITAL COLOR CAMERA	SCV-5085* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A104-UL	
NETWORK CAMERA	SNB-8000* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A105-UL	
NETWORK CAMERA	SNV-8080* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A106-UL	
NETWORK CAMERA	SNZ-6320	E158873-A107-UL	
NETWORK CAMERA	SNP-6320RH*, SNP-L6233RH* (* is blank or N or P: N=NTSC,P=PAL)	E158873-A108-UL	
NETWORK CAMERA	SNP-5321H*, SNP-L5233H* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A109-UL	
NETWORK CAMERA	SNP-5321*, SNP-L5233* (* is blank or N: NTSC or P:PAL)	E158873-A110-UL	
NETWORK CAMERA	SND-L6013R*, SND-L6013*, SND-L6012*, SND-L5013* (* is blank or N or P: N:NTSC/P:PAL)	E158873-A111-UL	
NETWORK CAMERA	SNO-L6083R*, SNO-L5083R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A113-UL	
Network Video Recorder	SRN-1673S*(* is blank or N or P: N = NTSC, P=PAL)	E158873-A115-UL	
NETWORK CAMERA	SNO-L6013R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A118-UL	
NETWORK CAMERA	SND-L6083R*, SND-L5083R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A119-UL	
Network Video Recorder	SRN-873S* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A120-UL	
NETWORK CAMERA	SNV-L6083R*, SNV-L5083R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A121-UL	

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NETWORK CAMERA	SNB-9000* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A122-UL	
Optical PTZ Accessary	SBP-301HF	E158873-A125-UL	
Optical PTZ Accessary	SBP-300HF	E158873-A126-UL	
NETWORK CAMERA	SNV-8081R* (* is Blank or N or P: N = NTSC, P=PAL)	E158873-A127-UL	
NETWORK CAMERA	SNO-8081R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A128-UL	
NETWORK CAMERA	SNV-6085R* (* is blank or N or P: N = NTSC, P=PAL) SNV-6085* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A129-UL	
DIGITAL COLOR CAMERA	SCB-6003* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A130-UL	
DIGITAL COLOR CAMERA	SCO-6023R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A132-UL	
DIGITAL COLOR CAMERA	SCV-6083R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A133-UL	
DIGITAL COLOR CAMERA	SCV-6023R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A135-UL	
DIGITAL COLOR CAMERA	SCD-6023R*, SCD-6013* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A136-UL	
DIGITAL COLOR CAMERA	SCD-6083R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A137-UL	
DIGITAL COLOR CAMERA	SCO-6083R*(* is blank or N or P: N = NTSC, P=PAL)	E158873-A138-UL	
NETWORK CAMERA	SNV-L6014RM*, SNV-L6013R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A139-UL	
DIGITAL COLOR CAMERA	PNO-9080R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A140-UL	
NETWORK CAMERA	PNV-9080R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A141-UL	
NETWORK CAMERA	PND-9080R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A142-UL	
Digital Video Recorder	SRD-1685*, SRD-894*, HRD-842* (* is blank or N or P, N=NTSC/ P=PAL)	E158873-A143-UL	
Digital Video Recorder	SRD-1694*, HRD-1642* (* is blank or N or P, N=NTSC/ P=PAL)	E158873-A144-UL	
Network Video Recorder (NVR)	XRN-2011*, XRN-2010*, XRN-3010*, XRN-1610* (* is blank or N or P: N=NTSC, P=PAL) XRN-2010P/DM, XRN-3010P/DM, XRN-3010A, XRN-2011A, XRN-2010A, XRN-1610A	E158873-A146-UL	
NETWORK CAMERA	QNO-7030R*, QNO-7020R*, QNO-7010R*, QNO-6030R*, QNO-6020R*, QNO-6010R*, QNO-6070R*, QNO-7080R*, QNO-6071R* (* is blank or N or	E158873-A147-UL	

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	P: N = NTSC, P=PAL)		
NETWORK CAMERA	QND-7030R*, QND-7020R*, QND-7010R*, QND-6030R*, QND-6020R*, QND-6010R*, QND-6070R*, QND-7080R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A148-UL	
NETWORK CAMERA	QNV-7030R*, QNV-7020R*, QNV-7010R*, QNV-6030R*, QNV-6020R*, QNV-6010R*, QNV-6070R*, QNV-7080R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A149-UL	
Network Video Recorder	XRN-1610S* (* is blank or N or P: N=NTSC, P=PAL) XRN-1610SP/DM, XRN-1610SA	E158873-A150-UL	
NETWORK CAMERA	PNF-9010RV*, PNF-9010R*, PNF-9010RVM* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A151-UL	
NETWORK CAMERA	PNM-9020V* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A152-UL	
Network Video Recorder	PRN-4011* (* is blank or N or P: N=NTSC, P=PAL)	E158873-A153-UL	
DIGITAL COLOR CAMERA	HCP-6320*, HCP-6320A*, HCP- 6230* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A154-UL	
DIGITAL COLOR CAMERA	HCP-6320H*, HCP-6320HA*, HCP-6230H* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A155-UL	
NETWORK CAMERA	PNP-9200RH*, XNP-6370RH*, XNP-6330RH* (* is blank or N or P: N=NT, P=PAL)	E158873-A156-UL	
NETWORK CAMERA	XNB-8000*, XNB-6000* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A157-UL	
NETWORK CAMERA	XNO-8080R*, XNO-6080R*, XNO-6120R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A158-UL	
NETWORK CAMERA	XNV-8040R*, XNV-8030R*, XNV-8020R*, XNV-6020*, XNV- 6010*, XNV-6020R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A159-UL	
NETWORK CAMERA	XND-8040R*, XND-8030R*, XND-8020R*, XND-6020*, XND- 6010*, XND-6020R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A160-UL	
NETWORK CAMERA	XNV-8080R*, XNV-6080R*, XNV-6080*, XNV-6120R*, XNV- 6120* (* is blank or N or P: N = NTSC, P=PAL) , XNV-8080RS, XNV-6080RS, XNV-6120RS.	E158873-A161-UL	
NETWORK CAMERA	XND-8080RV*, XND-8080R*, XND-6080RV*, XND-6080R*, XND-6080V*, XND-6080* (* is	E158873-A162-UL	

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	blank or N or P: N = NTSC, P=PAL)		
AHD Multi Directional Camera	HCM-9020VQ* (is blank or N or P: N = NTSC, P=PAL)	E158873-A163-UL	
NETWORK CAMERA	XNO-8020R*, XNO-8030R*, XNO-8040R*, XNO-6010R*, XNO-6020R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A164-UL	
NETWORK CAMERA	XNV-6011* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A165-UL	
DIGITAL COLOR CAMERA	HCD-6080R*, HCD-6070R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A167-UL	
DIGITAL COLOR CAMERA	HCV-6080R*, HCV-6070R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A168-UL	
NETWORK CAMERA	XNP-6120H* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A169-UL	
NETWORK CAMERA	XND-8020F*, XND-6011F* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A170-UL	
NETWORK CAMERA	PNM-9080VQ* (* is blank or N or P: N = NTSC, P = PAL)	E158873-A172-UL	
Network Storage	SRB-160S	E158873-A173-UL	
NETWORK CAMERA	TNB-6030* (* is blank or N or P: N = NTSC, P = PAL)	E158873-A174-UL	
NETWORK CAMERA	PNM-9081VQ* (* is blank or N or P: N = NTSC, P = PAL)	E158873-A176-UL	
NETWORK CAMERA	XNO-6085R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A177-UL	
NETWORK CAMERA	XNB-6005* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A178-UL	
NETWORK VIDEO RECORDER	SNR-D5401N	E158873-A179-UL	
NETWORK CAMERA	XND-6085*, XND-6085V* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A180-UL	
NETWORK CAMERA	XNV-6085* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A181-UL	
NETWORK CAMERA	XNP-6040H* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A182-UL	
NETWORK VIDEO DECODER	SPD-150* (* is blank or N or P: N = NTSC, P=PAL), SPD-151	E158873-A184-UL	
DIGITAL COLOR CAMERA	HCB-6000*, HCB-7000* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A185-UL	
DIGITAL COLOR CAMERA	HCZ-6320*, HCZ-6321* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A186-UL	
NETWORK CAMERA	XNF-8010RVM*, XNF-8010RV*, XNF-8010R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A187-UL	

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DIGITAL COLOR CAMERA	HCO-6070R*, HCO-6080R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A188-UL	
NETWORK CAMERA	XNB-6001* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A189-UL	
DIGITAL COLOR CAMERA	HCO-7070R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A190-UL	
LENS MODULE	SLA-T2480*, SLA-T2480V*, SLA-T4680*, SLA-T4680V* (* is blank or N or P: N = NTSC, P=PAL), SLA-T4680D, SLA-T4680DW, SLA-T4680DS, SLA-T2415, SLA-T2815B.	E158873-A191-UL	
DIGITAL COLOR CAMERA	HCD-7070R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A192-UL	
DIGITAL COLOR CAMERA	HCV-7070R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A193-UL	
NETWORK VIDEO RECORDER	TRM-1610S	E158873-A194-UL	
LENS MODULE	SLA-T1080F* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A195-UL	
NETWORK SWITCH	SPN-10080P, SPN-10080PM	E158873-A196-UL	
ANALOG CAMERA	HCV-7010R*, HCV-7020R*, HCV-7030R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A197-UL	
DIGITAL COLOR CAMERA	HCD-7010R*, HCD-7020R*, HCD-7030R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A198-UL	
DIGITAL COLOR CAMERA	HCO-7010R*, HCO-7020R* , HCO-7030R* (* is blank or N or P: N = NTSC, P=PAL)	E158873-A199-UL	
NETWORK CAMERA	XNP-6320, QNP-6230, XNP-6321	E158873-A200-UL	
NETWORK CAMERA	XNP-6320H, XNP-6320HS, QNP-6230H, XNP-6321H	E158873-A201-UL	
NETWORK THERMAL CAMERA	TNO-4050T, TNO-4030T, TNO-4040T	E158873-A202-UL	
NETWORK THERMAL CAMERA	TNO-4051T, TNO-4041T	E158873-A204-UL	
NETWORK CAMERA	XNV-6013M	E158873-A205-UL	
NETWORK CAMERA	XNV-6012M, XNV-6012	E158873-A206-UL	
NETWORK CAMERA	XNV-6022R, XNV-6022RM	E158873-A207-UL	
NETWORK CAMERA	LNO-6070R, LNO-6071R	E158873-A208-UL	
NETWORK CAMERA	LNO-6030R, LNO-6020R, LNO-6010R, LNO-6031R, LNO-6021R, LNO-6011R, LNO-6011RW	E158873-A209-UL	
NETWORK CAMERA	LNV-6070R	E158873-A210-UL	
NETWORK CAMERA	LND-6070R, LND-6071R	E158873-A213-UL	
NETWORK CAMERA	LNV-6030R, LNV-6020R, LNV-6010R,	E158873-A214-UL	

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	LVN-6031R, LVN-6021R, LVN-6011R		
NETWORK CAMERA	LND-6030R, LND-6020R, LND-6010R	E158873-A215-UL	
NETWORK CAMERA	XNV-L6080R, XNV-L6080	E158873-A216-UL	
NETWORK CAMERA	XND-L6080RV, XND-L6080R, XND-L6080V	E158873-A217-UL	
NETWORK CAMERA	XNO-L6080R	E158873-A218-UL	
NETWORK CAMERA	PNM-7000VD	E158873-A220-UL	
NETWORK VIDEO ENCODER	SPE-410, SPE-410A* (* is Blank or N or P, N = NTSC, P = PAL)	E158873-A222-UL	
NETWORK VIDEO ENCODER	SPE-1610, SPE-1610A* (* is Blank or N or P, N = NTSC, P = PAL), NVE3016	E158873-A223-UL	
NETWORK POSITIONING CAMERA	TNU-6320, TNU-6321	E158873-A224-UL	
Network Video Recorder	QRN-1610S, QRN-1620S, LRN-1610S	E158873-A225-UL	
NETWORK CAMERA	QNE-7080RV, QNE-6080RV	E158873-A226-UL	
NETWORK CAMERA	PNM-9000VQ	E158873-A227-UL	
Network Camera	XNP-6550RH, XNP-6320RH, XNP-6250RH, QNP-6230RH	E158873-A229-UL	
NETWORK CAMERA	PNM-9320VQP, PNM-9321VQP.	E158873-A230-UL	
NETWORK CAMERA	XNZ-6320	E158873-A231-UL	
NETWORK ENCODER	SPE-110N, SPE-110A* (* is Blank or N or P, N = NTSC, P = PAL)	E158873-A232-UL	
THERMAL POSITIONING CAMERA	TNU-4041T, TNU-4051T	E158873-A233-UL	
NETWORK CAMERA	PNM-9030V	E158873-A234-UL	
NETWORK CAMERA	TNV-7010RC	E158873-A235-UL	
NETWORK CAMERA	XND-8081VZ, XND-8081FZ, XND-6081VZ, XND-6081FZ	E158873-A236-UL	
DIGITAL COLOR CAMERA	HCF-8010V	E158873-A239-UL	
ANALOG CAMERA	HCO-6020R	E158873-A241-UL	
NETWORK CAMERA	XNV-6081, XNV-6081R, XNV-8081R	E158873-A242-UL	
NETWORK VIDEO RECORDER	TRM-810S, TRM-410S	E158873-A243-UL	
ANALOG CAMERA	HCD-6020R, HCD-6010	E158873-A244-UL	
NETWORK CAMERA	XND-6081V, XND-6081F, XND-6081RV, XND-6081RF, XND-8081RV, XND-8081RF	E158873-A245-UL	
NETWORK CAMERA	XND-L6080	E158873-A246-UL	
NETWORK CAMERA	TNO-6010M	E158873-A247-UL	
ANALOG CAMERA	SCO-6085R	E158873-A248-UL	
NETWORK CAMERA	PNM-9000VD	E158873-A249-UL	
NETWORK CAMERA	QND-6083R, QND-6082R, QND-6073R, QND-6072R,	E158873-A250-UL	

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	QND-6032R, QND-6022R, QND-6012R		
NETWORK CAMERA	QNE-8021R, QNE-8011R	E158873-A251-UL	
NETWORK CAMERA	QND-8021, QND-8011	E158873-A252-UL	
NETWORK CAMERA	QNO-8080R, QNO-8010R, QNO-8020R, QNO-8030R	E158873-A253-UL	
NETWORK CAMERA	QND-6021, QND-6011	E158873-A254-UL	
NETWORK CAMERA	QNO-6083R, QNO-6082R, QNO-6012R, QNO-6022R, QNO-6032R, QNO-6072R, QNO-6073R	E158873-A255-UL	
NETWORK CAMERA	QNV-6083R, QNV-6082R, QNV-6073R, QNV-6072R, QNV-6012R, QNV-6022R, QNV-6032R, QNV-6012RA.	E158873-A256-UL	
NETWORK CAMERA	QNV-8080R, QNV-8010R, QNV-8020R, QNV-8030R	E158873-A257-UL	
NETWORK CAMERA	QND-8080R, QND-8010R, QND-8020R, QND-8030R	E158873-A258-UL	
NETWORK CAMERA	QNF-8010	E158873-A259-UL	
NETWORK CAMERA	LNV-6012R, LNV-6022R, LNV-6032R	E158873-A260-UL	
NETWORK CAMERA	LNV-6072R	E158873-A261-UL	
NETWORK CAMERA	LND-6012R, LND-6022R, LND-6032R	E158873-A262-UL	
NETWORK CAMERA	LND-6072R	E158873-A263-UL	
NETWORK CAMERA	QNV-6024RM, QNV-6023R	E158873-A264-UL	
NETWORK CAMERA	LNO-6012R, LNO-6022R, LNO-6032R	E158873-A265-UL	
NETWORK CAMERA	LNO-6072R	E158873-A266-UL	
Digital Video Recorder	HRX-1621* (* is Blank or N or P : P=PAL, N=NTSC)	E158873-A267-UL	
Digital Video Recorder	HRX-821* (* is Blank or N or P : P=PAL, N=NTSC)	E158873-A268-UL	
NETWORK THERMAL CAMERA	TNO-3010T, TNO-3020T, TNO-3030T	E158873-A269-UL	
NETWORK CAMERA	PNM-9084QZ	E158873-A270-UL	
NETWORK CAMERA	XNP-6371RH	E158873-A275-UL	
NETWORK CAMERA	XNZ-L6320	E158873-A276-UL	
NETWORK CAMERA	PNM-9084RQZ*, PNM-9085RQZ* (* is Blank or N or P : P=PAL, N=NTSC)	E158873-A6001-UL	
NETWORK VIDEO RECORDER	WRN-1610S	E158873-A6002-UL	
NETWORK VIDEO RECORDER	WRN-810S* (* is Blank or N or P : P=PAL, N=NTSC)	E158873-A6003-UL	
NETWORK CAMERA	PNB-A9001	E158873-A6005-UL	
NETWORK CAMERA	TNB-9000	E158873-A6006-UL	
NETWORK CAMERA	PNO-A9081R	E158873-A6007-UL	
NETWORK CAMERA	PNV-A9081R	E158873-A6008-UL	
NETWORK CAMERA	PND-A9081RF	E158873-A6009-UL	
NETWORK CAMERA	QNB-8002	E158873-A6010-UL	
NETWORK CAMERA	QNB-6002	E158873-A6011-UL	

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NETWORK CAMERA	PND-A9081RV	E158873-A6012-UL	
NETWORK CAMERA	QNF-9010	E158873-A6013-UL	
NETWORK CAMERA	XNV-8081RE, XNV-6081RE, XND-8081REV, XND-6081REV	E158873-A6014-UL	
NETWORK CAMERA	XNB-9002, XNB-8002	E158873-A6022-UL	
NETWORK CAMERA	XNV-9082R, XNV-8082R	E158873-A6023-UL	
NETWORK CAMERA	XNO-9082R, XNO-8082R	E158873-A6024-UL	
NETWORK CAMERA	XND-9082RV, XND-8082RV, XND-9082RF, XND-8082RF	E158873-A6025-UL	

CERTIFICATE OF COMPLIANCE

Certificate Number E158873
Report Reference E158873-A6022-UL
Issue Date 2020-MAY-26

Issued to: Hanwha Techwin Co Ltd
6, Pangyo-ro 319beon-gil, Bundang-gu
Seongnam-si Gyeonggi-do 13488 KOREA

**This certificate confirms that
representative samples of**

INFORMATION TECHNOLOGY EQUIPMENT INCLUDING
ELECTRICAL BUSINESS EQUIPMENT
NETWORK CAMERA
XNB-9002, XNB-8002

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

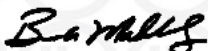
Standard(s) for Safety: UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07 -
Information Technology Equipment - Safety - Part 1:
General Requirements

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2019-05-09 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Listing
CCN:	NWGQ, NWGQ7 (Information Technology Equipment Including Electrical Business Equipment)
Complementary CCN:	N/A
Product:	NETWORK CAMERA
Model:	XNB-9002, XNB-8002
Rating:	Rated input: 12 Vdc, 0.96 A or 24 Vac, 50/60 Hz, 0.97 A or PoE (48 Vdc), 0.27 A
Applicant Name and Address:	HANWHA TECHWIN CO LTD 6, PANGYO-RO 319BEON-GIL, BUNDANG-GU SEONGNAM-SI GYEONGGI-DO 13488 KOREA

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared By: Sungil Kim / Project Handler

Reviewed By: HanQ Choi / Reviewer

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

B. Generic Inspection Instructions -

- i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
- ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
- iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

NETWORK CAMERA intended for indoor use.

Electronic components were mounted on PWB and housed in metal enclosure and supplied by SELV and LPS.

Model Differences

- Basic model is XNB-9002 (4K resolution)
- Model XNB-8002 is identical to basic model XNB-9002 except for Lens (6M resolution)

Test Item Particulars

Equipment mobility	Fixed
Connection to the mains	No direct connection
Operating condition	continuous
Access location	operator accessible
Over voltage category (OVC)	OVC I
Mains supply tolerance (%) or absolute mains supply values	No direct connection
Tested for IT power systems	No
IT testing, phase-phase voltage (V)	N/A
Class of equipment	Class III (supplied by SELV)
Considered current rating of protective device as part of the building installation (A)	N/A
Pollution degree (PD)	PD 2
IP protection class	IP X0
Altitude of operation (m)	Up to 2 000
Altitude of test laboratory (m)	Less than 2 000
Mass of equipment (kg)	0.88

Technical Considerations

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of : 55 °C
- The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual

Additional Information

Original (4789436104)

- Maximum normal load: Continuous operation and loaded 0.5 A for USB.

Additional Standards

The product fulfills the requirements of: N/A

Markings and Instructions

Clause Title	Marking or Instruction Details
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Company identification	Listee's or Recognized companys name, Trade Name, Trademark or File Number
Power rating - Model	Model Number
Fuses - Rating	Rated current and voltage and type located on or adjacent to fuse or fuseholder.
Replaceable batteries	"CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions."
Website Manual -1	This product is intended to be supplied by a Listed Power Supply Unit marked "Class 2" or "LPS" and rated from 12 Vdc 0.96 A, 24 Vac, 0.97 A, or PoE, 0.27 A.
Website Manual -2	The following statement or similar shall be included in the User Manual: "Unit is intended for installation in a Network Environment 0 as defined in IEC TR 62102. As such, associated Ethernet wiring shall be limited to inside the building."
Website Manual -3	The following statement or similar shall be included in the User Manual: "The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802-3af shall be a UL Listed device with the output evaluated as a Limited Power Source as defined in UL60950-1.
Hard Copy	A. IMPORTANT B. Please check 'Manuals' from our website, before connecting to the supply. C. Company website URL (https://www.~~)

Special Instructions to UL Representative

N/A

BD1.0	TABLE: Production-Line Testing Requirements					
BD1.1	Electric Strength Test Special Constructions – Refer to Generic Inspection Instructions, Part AC for further information.					
Model	Component	Removable parts	Test probe location	Test V rms	Test V dc	Test Time, s
BD1.2	Earthing Continuity Test Exemptions – This test is not required for the following models:					
	All models					
BD1.3	Electric Strength Test Exemptions – This test is not required for the following models:					
	All models					
BD1.4	Electric Strength Test Component Exemptions – The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:					

BE1.0	Sample and Test Specifics for Follow-Up Tests at UL				
Model	Component	Material	Test	Sample (s)	Test Specifics

1.5.1	TABLE: List of critical components					Pass
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Product Category CCN(s)	Mark(s) of conformity	Supplement ID
Enclosure (Metal)	Interchangeable	Interchangeable	Aluminium, Min. 2.0 mm thickness. see enclosure for dimension.	-	-	
Enclosure - SD card Cover (Plastic)	LOTTE ADVANCED MATERIALS CO LTD	NH-1035(+)	Min. 1.5 mm thickness, rated Min. V-0, 80 deg. C.	QMFZ2	UL (E115797)	
Internal Plastic Part	SAMYANG CORPORATION	3500G-30	Min. 1.5 mm thickness, rated Min. V-0, 125 deg.C.	QMFZ2	UL (E121254)	
Fuse (F1)	LITTELFUSE INC	449*	125 V, 2.0 A	JDYX2	UL (E10480)	
Fuse (F1) (Alternate)	SEMITELELECTRONICS CO LTD	S6125S	125 V, 2.0 A	JDYX2	UL (E338954)	
Transformer(T8)	SHENZHEN GROUP-TEK ELECTRONICS TECHNOLOGY CO LTD	EE1936R	130 deg.C, see enclosure for detail.	-	-	
Line Filter (T3)	SHENZHEN GROUP-TEK ELECTRONICS TECHNOLOGY CO LTD	PCM10020R	125 deg.C, 3.0 mH	-	-	
Line Filter (T7)	SHENZHEN GROUP-TEK ELECTRONICS TECHNOLOGY CO LTD	PCM10021R	125 deg.C, 18.0 mH	-	-	
Optocoupler (LS1)	LITE-ON TECHNOLOGY CORP	LTV-816	Isolation Voltage: 5300. Max. Operation Temperature:110 deg. C	FPQU2	UL (E113898)	

Optocoupler (LS1) (Alternate)	COSMO ELECTRONICS CORP	K1010X*	Isolation Voltage: 5000. Max. Operation Temperature:115 deg. C	FPQU2	UL (E169586)	
Optocoupler (LS1) (Alternate)	COSMO ELECTRONICS CORP	K1010X-1*	Isolation Voltage: 5000. Max. Operation Temperature:115 deg. C	FPQU2	UL (E169586)	
Stepping Motor(Zoom, Focus , motor)	TOKYO MICRO INC.	8S084L99	Operation Voltage DC 5.0 V,, pulse rate 480pps	-	-	
Lithium Battery (BAT1)	SEIKO INSTRUMENT INC MICRO-ENERGY DIV	ML414H	Lithium (Coin), Rechargeable, Max. 3.4 Vdc, Norminal Capacity 1.0mAH Maximum charging current 300mAh	BBCV2	UL (MH15628)	
Thermal Pad	KOMOTECH CO LTD	KGP-1(a)	Min. 0.2 mm thickness, rated V-0, 150 deg.C	QMFZ2	UL (E245303)	
PWB	EXPRESS ELECTRONICS LTD	14MV0	Min. V-0, 130 deg.C.	ZPMV2	UL (E157925)	
PWB (Alternate)	Interchangeable	Interchangeable	Min. V-1, Min 105 deg.C	ZPMV2	UL	
Connectors and Receptacles (Secondary circuits)	Interchangeable	Interchangeable	-	ECBT2 or RTRT2	UL	
Connectors and Receptacles (Secondary circuits) (Alternate)	Interchangeable	Interchangeable	Copper alloy pins housed in bodies of plastic rated Min. V-2	QMFZ2	UL	

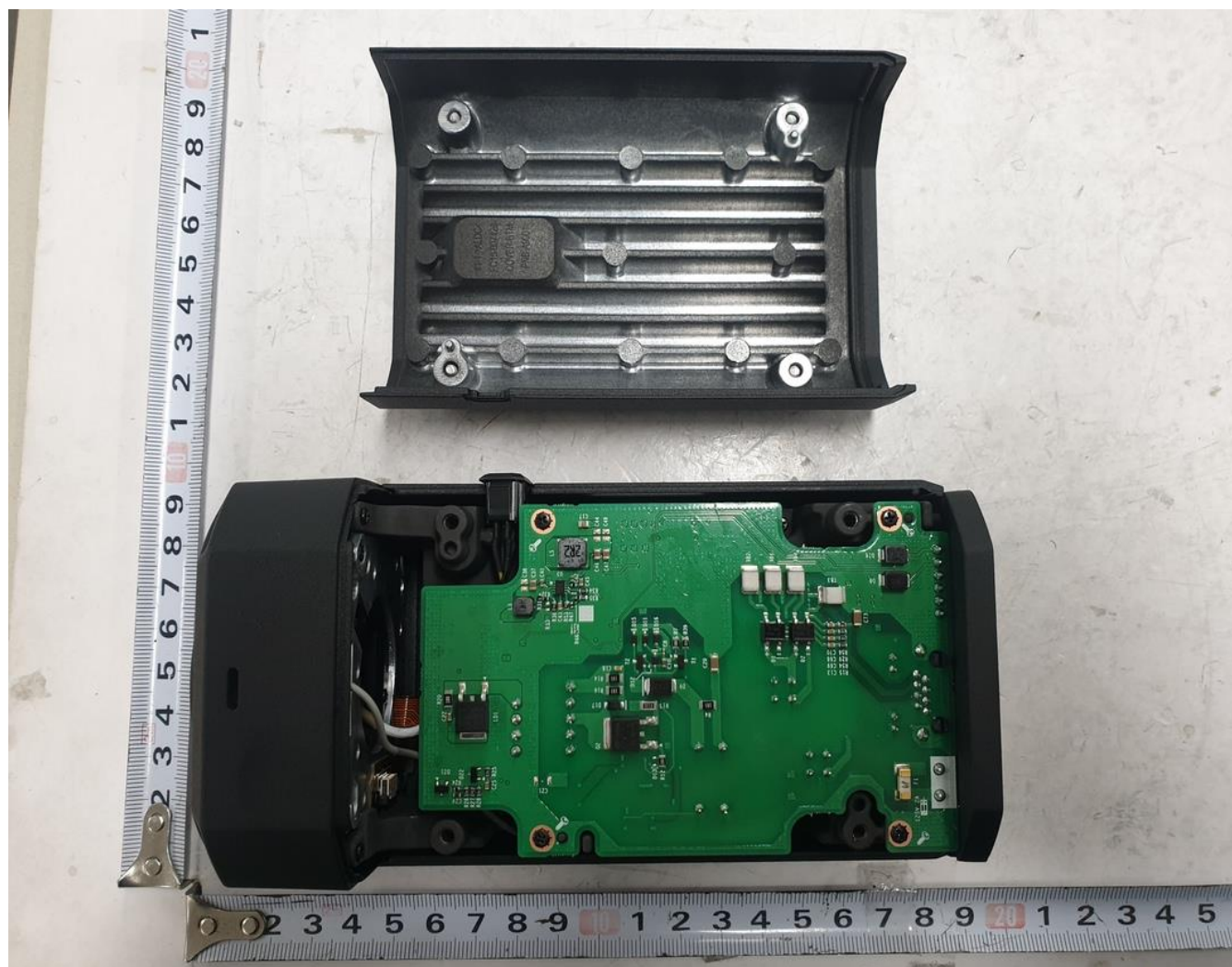
Internal Wiring (Secondary)	Interchangeable	Interchangeable	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1; Min. 30 V, 80 deg. C	AVLV2	UL	
Label	Interchangeable	Interchangeable	Min. 55 deg.C if max. surface temperature not specified.	PGDQ2 or PGJI2	UL	
FPWB	Interchangeable	Interchangeable	Min. V-0, 80 deg.C.	QMFZ2 or QMTS2	UL	

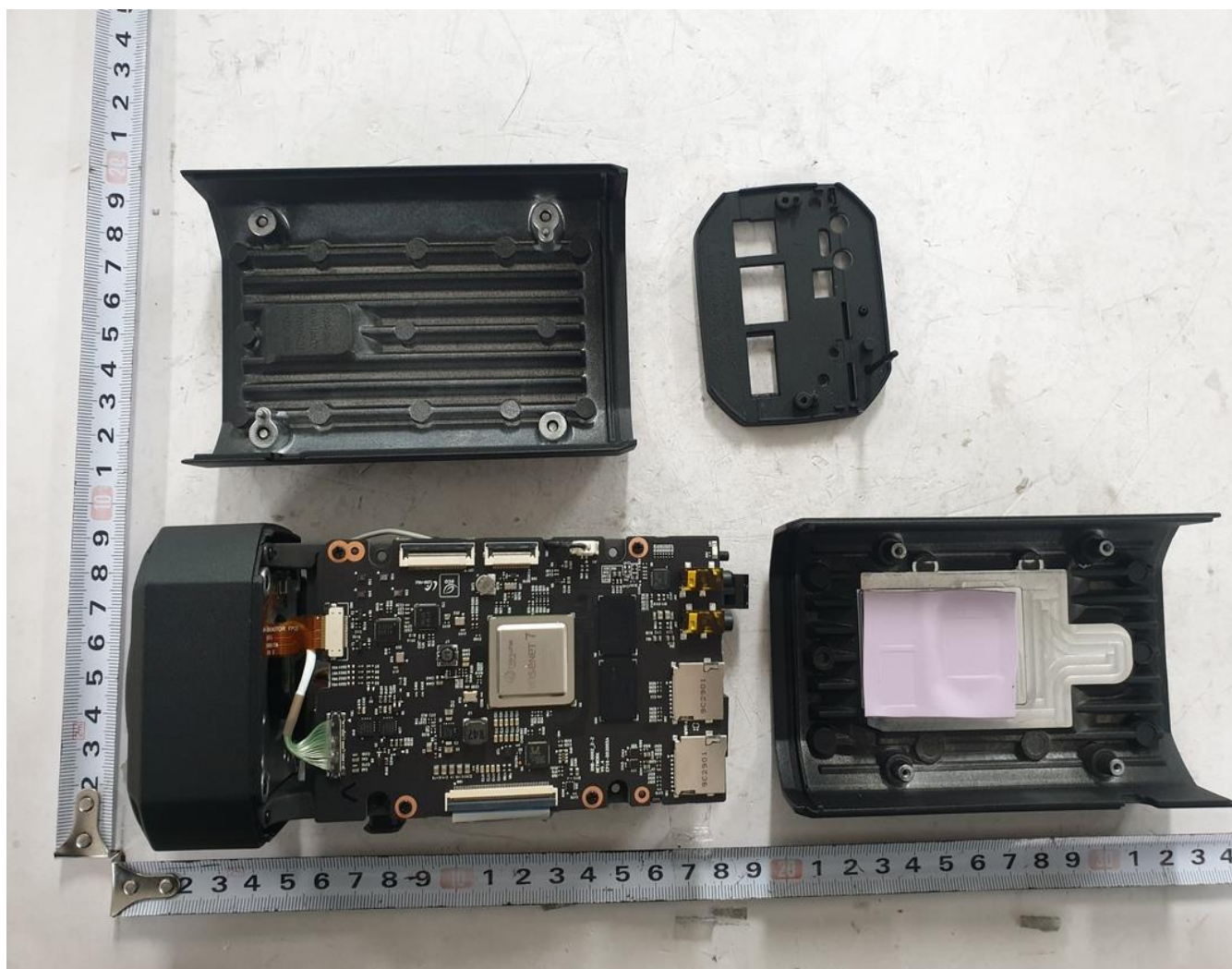
Enclosures

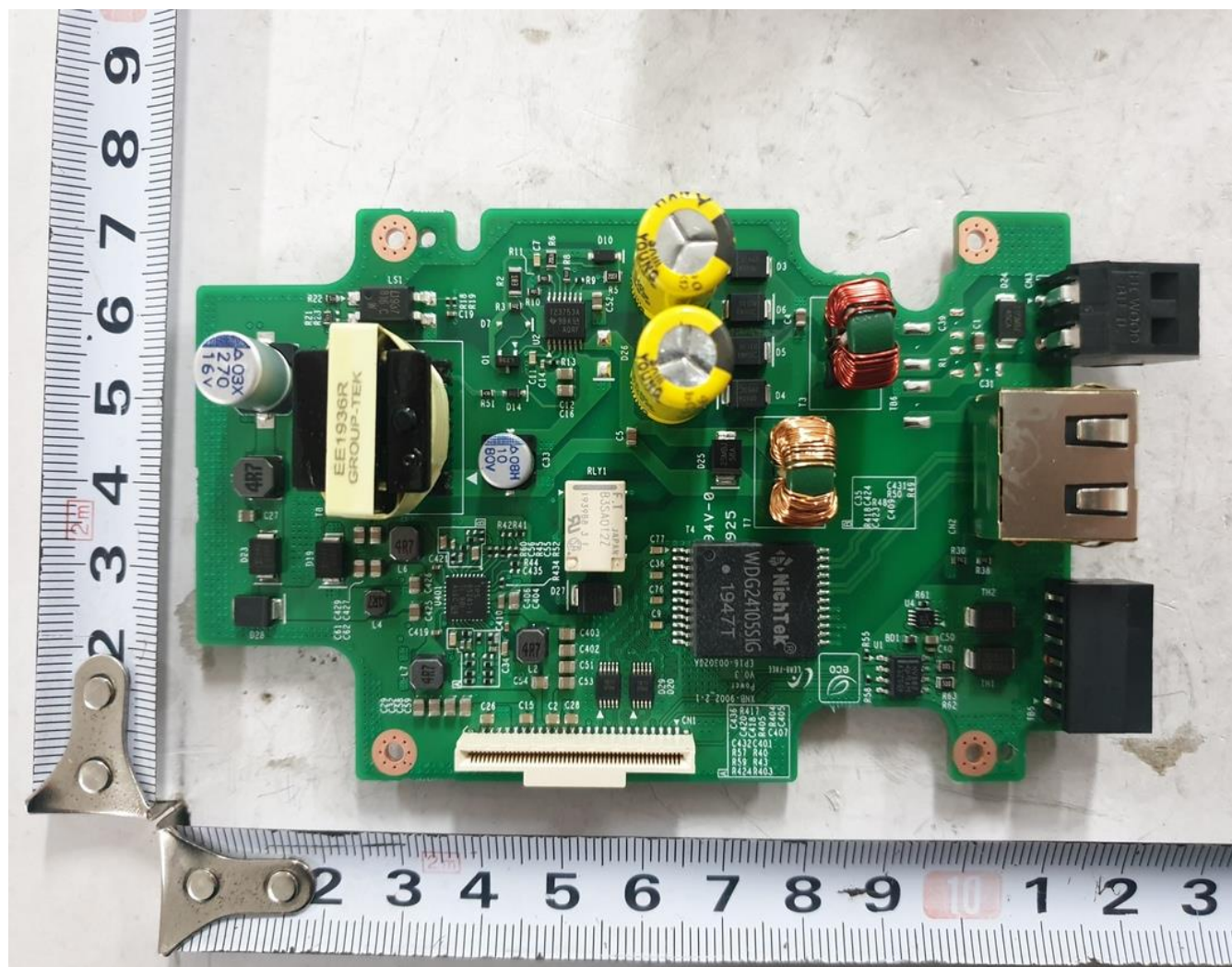
Type	Supplement Id	Description
Photographs	03-01	Overall -1
Photographs	03-02	Overall -2
Photographs	03-03	Internal -1
Photographs	03-04	Internal -2
Photographs	03-05	Power board Top
Photographs	03-06	Power board Bottom
Photographs	03-07	Main board Top
Photographs	03-08	Main board Bottom
Manuals	06-01	Manual
Miscellaneous	07-01	Transformer (T8) spec
Miscellaneous	07-02	Label
Miscellaneous	07-03	Enclosure dimension
Miscellaneous	07-04	Dual language safety labeling CRD

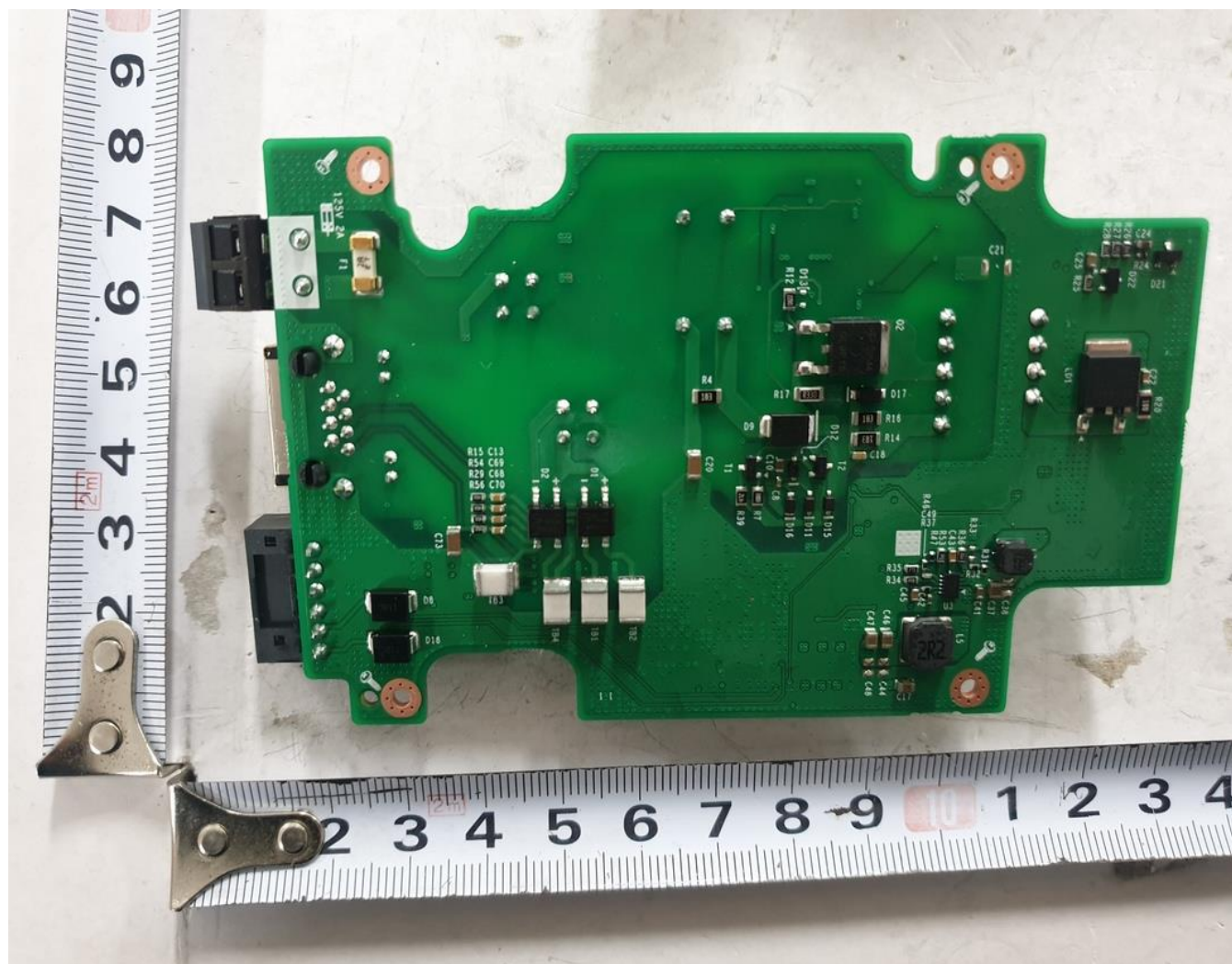


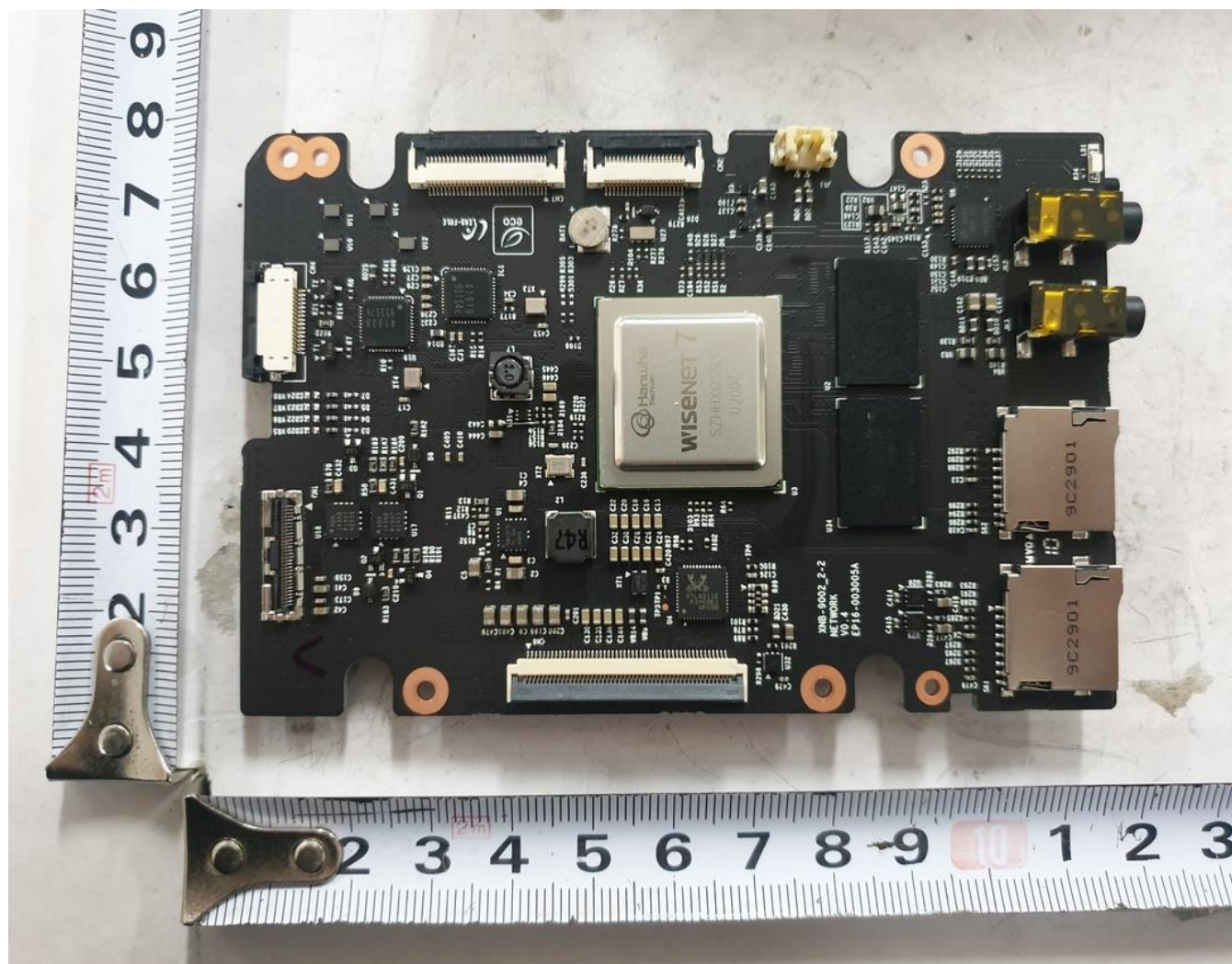


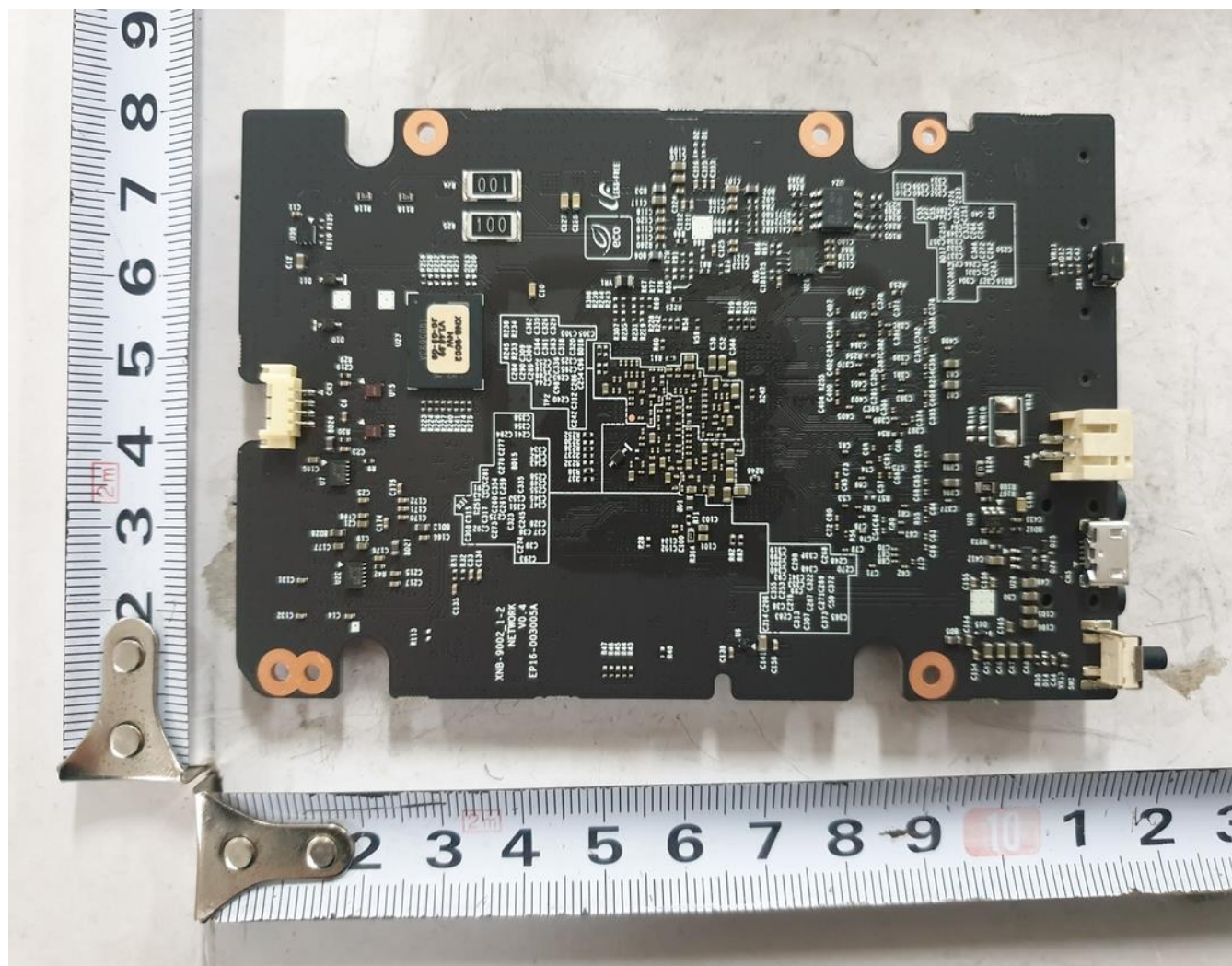












overview

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean the contaminated area on the product surface with a soft, dry cloth or a damp cloth.
(Do not use a detergent or cosmetic products that contain alcohol, solvents or surfactants or oil constituents as they may distort or cause damage to the product.)
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/ accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product is intended to be supplied by a Listed Power Supply Unit marked "Class 2" or "LPS" and rated from 12 Vdc, 1.0 A or PoE, 0.27 A. (XND-8082RV/XND-8082RV/XND-8082RF/XND-8082RF)
16. This product is intended to be supplied by a Listed Power Supply Unit marked "Class 2" or "LPS" and rated from 12 Vdc 1.0 A, 24 Vac, 1.1 A, or PoE, 0.27 A. (XNV-9082R/XNV-8082R)
17. This product is intended to be supplied by a Listed Power Supply Unit marked "Class 2" or "LPS" and rated from 12 Vdc 1.1 A, 24 Vac, 1.1 A, or PoE, 0.27 A. (XNO-8082R/XNO-8082R)
18. This product is intended to be supplied by a Listed Power Supply Unit marked "Class 2" or "LPS" and rated from 12 Vdc 0.96 A, 24 Vac, 0.97 A, or PoE, 0.27 A. (XNB-9002/XNB-8002)
19. This product is intended to be supplied by isolation power.
20. If you use excessive force when installing the product, the camera may be damaged and malfunction. If you forcibly install the product using non-compliant tools, the product may be damaged.
21. Do not install the product in a place where chemical substances or oil mist exists or may be generated. As edible oils such as soybean oil may damage or warp the product, do not install the product in the kitchen or near the kitchen table.
This may cause damage to the product.



22. When installing the product, be careful not to allow the surface of the product to be stained with chemical substance.
Some chemical solvents such as cleaner or adhesives may cause serious damage to the product's surface.
23. If you install/disassemble the product in a manner that has not been recommended, the production functions/ performance may not be guaranteed.
Install the product by referring to "Installation & connection" in the user manual.
24. Installing or using the product in water can cause serious damage to the product.
25. Although a rapid change in temperature could cause frost inside the dome, there will be no problem with the video.

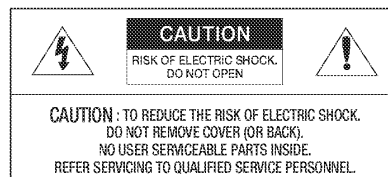
WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

To prevent injury, this apparatus must be securely attached to the Wall/ceiling in accordance with the installation instructions.

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

overview

Class I construction

An apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.

Battery

Batteries(battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

The battery cannot be replaced.

Disconnection Device

Disconnect the main plug from the apparatus, if it's defected. And please call a repair man in your location.

When used outside of the U.S., it may be used HAR code with fittings of an approved agency is employed.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

ATTENTION

IL Y A RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UNE BATTERIE DE TYPE INCORRECT.
METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS.

CAUTION

These servicing instructions are for use by qualified service personnel only.
To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

Please use the input power with just one camera and other devices must not be connected.

The ITE is to be connected only to PoE networks without routing to the outside plant.

The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802.3af shall be a UL Listed device with the output evaluated as a Limited Power Source as defined in UL60950-1.

Unit is intended for installation in a Network Environment 0 as defined in IEC TR 62102.
As such, associated Ethernet wiring shall be limited to inside the building.

Please read the following recommended safety precautions carefully.

- Do not place this apparatus on an uneven surface.
- Do not install on a surface where it is exposed to direct sunlight, near heating equipment or heavy cold area.
- Do not place this apparatus near conductive material.
- Do not attempt to service this apparatus yourself.
- Do not place a glass of water on the product.
- Do not install near any magnetic sources.
- Do not block any ventilation openings.
- Do not place heavy items on the product.
- Please wear protective gloves when installing/removing the camera.
The high temperature of the product surface may cause a burn.

User's Manual is a guidance book for how to use the products.

The meaning of the symbols are shown below.

- Reference : In case of providing information for helping of product's usages
- Notice : If there's any possibility to occur any damages for the goods and human caused by not following the instruction
- × Please read this manual for the safety before using of goods and keep it in the safe place.

We do not guarantee the quality of third-party products (e.g. lenses, accessories) that you separately purchase.

WARNING

To Prevent damage which may caused by IR LED, don't stare at operating lamp.

For below models only.

XNV-9082R/XNV-8082R

XND-9082RV/XND-8082RV

XND-9082RF/XND-8082RF

XNO-9082R/XNO-8082R

Risk Group 1

WARNING IR emitted from this product.

Do not stare at operating lamp.

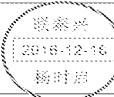
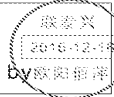
Product tested against IEC 62471

GROUP-TEK®



承 认 书

SPECIFICATION FOR APPROVAL

客户名称 CUSTOMER			
客户料号 MODEL NO.	EP23-001074A		
产品名称 PART NAME	POWER TRANSFORMER		
产品型号 PART TYPE	EE1936R		
版本 REV	X1		
签名 SIGNATURE	制图: Drawn by	审核: Checked by	批准: Approved by
	 2018-12-18 张春梅	 2018-12-18 杨时启	 2018-12-18 钱阳
客户承认 CUSTOMER APPROVAL	承认印: SIGNET 签名: SIGNATURE		

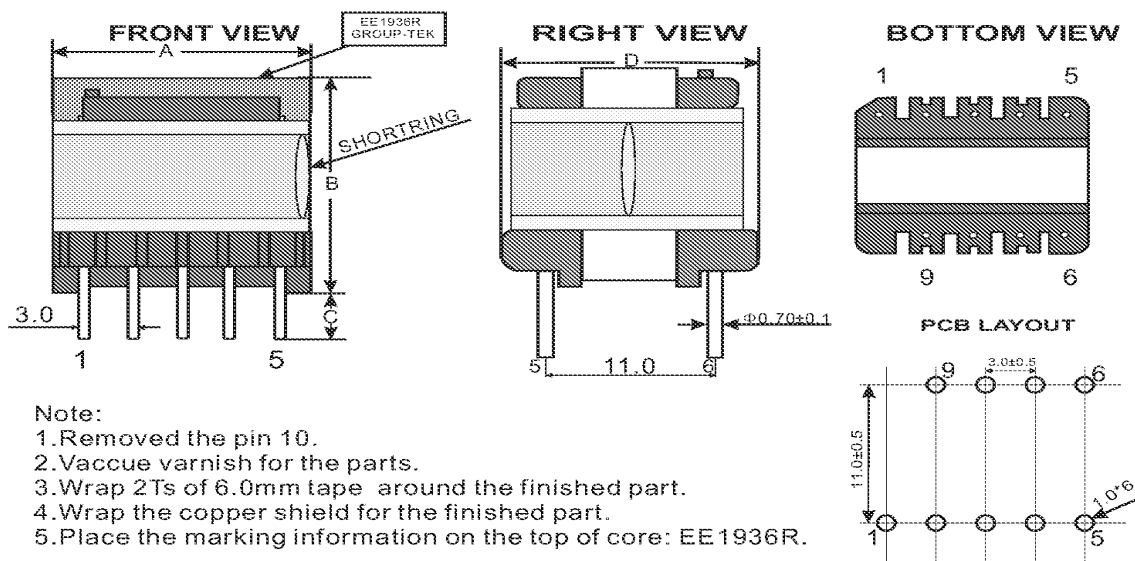
深圳市联泰兴电子科技有限公司
 SHENZHEN GROUP-TEK ELECTRONICS TECHNOLOGY CO., LTD
 地 址：深圳市宝安区石岩街道应人石工业区伟泰路 1 栋 (P. C: 518108)
 ADD: No.1 Block, WeiTai Rd. Ying Ren Shi Industry Park, Shi Yan Sub-District, Bao'An ShenZhen.
 TEL: +86-755-29810619 29810976 FAX: +86-755-29810159
 Http://www.group-tek.com E-mail:sale1@group-tek.com

GROUP-TEK®

A Leading Supplier of Magnetic Components

EE1936R

2. Mechanical Dimensions:



Note:

1. Removed the pin 10.
2. Vacuum varnish for the parts.
3. Wrap 2Ts of 6.0mm tape around the finished part.
4. Wrap the copper shield for the finished part.
5. Place the marking information on the top of core: EE1936R.

Unit: mm

A	B	C	D
Max	Max	+/-0.5	Max
20.5	20.0	3.5	16.5

GROUP-TEK®

A Leading Supplier of Magnetic Components

EE1936R**3. Electrical Characteristics :**

Specifications: at 25°C . Operating Temperature -40 to +125°C			
NO.	ITEM	TEST CONDITION	SPECIFICATION
1	Inductance	(1-3)@200kHz, 1.0Vac	160uH±7%.
2	Inductance	(4-5)@200kHz, 1.0Vac	76.5uH±15%.
3	Inductance	(7-9)@200kHz, 1.0Vac	60uH±15%.
4	Leakage Inductance	(1-3)@200kHz, 1.0Vac shorted other pins.	15uH Max.
5	DCR	(1-3) @ 25°C	0.265Ω Max.
6	DCR	(4-5) @ 25°C	0.970Ω Max.
7	DCR	(7-9) @ 25°C	0.096Ω Max.
8	HI-POT	PRI--SEC,AUX	1000Vac,5mA,60SEC
9	HI-POT	PRI,SEC,AUX--CORE	1000Vac,5mA,60SEC
10	INSULATION RESISTANCE	PRI--SEC DC500V	100MΩ Min.
11		PRI--CORE DC500V	100MΩ Min.
12		SEC--CORE DC500V	100MΩ Min.

GROUP-TEK[®]

A Leading Supplier of Magnetic Components

EE1936R

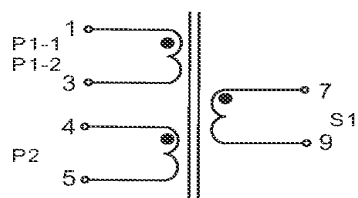
4. Winding Information:

WINDING SEQ.	ST-FN	WIRE/FOIL	TURNS	TURNS/LAYER (REF)	WRAP INSUL.	SLEEVE	NOTE
P1-1	1--3	0.30mm 2UEW	50	50	2T w9.3mm	N/A	1,2.
S1	7--9	3*0.32mm 2UEW	30	30	2T w9.3mm	N/A	1,2.
P1-2	1--3	0.30mm 2UEW	50	50	2T w9.3mm	N/A	1,2.
P2	4--5	0.20mm 2UEW	32	32	3T w9.3mm	N/A	1,2.

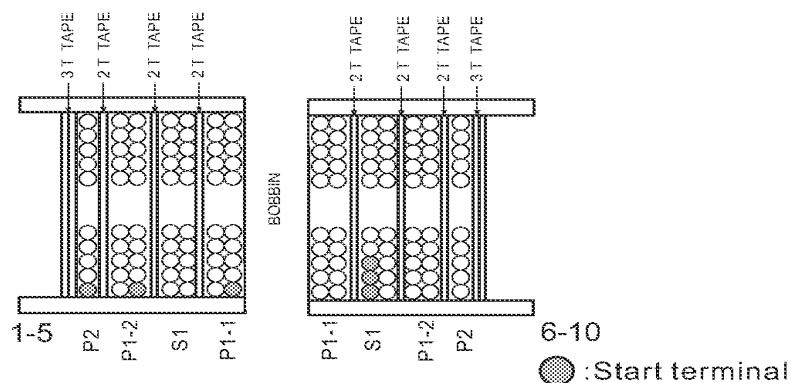
Note:

1. Place the bobbin pins left side of operator.
2. Clockwise and close winding.

5. Schematic:



6. Winding construction



GROUP-TEK®

A Leading Supplier of Magnetic Components

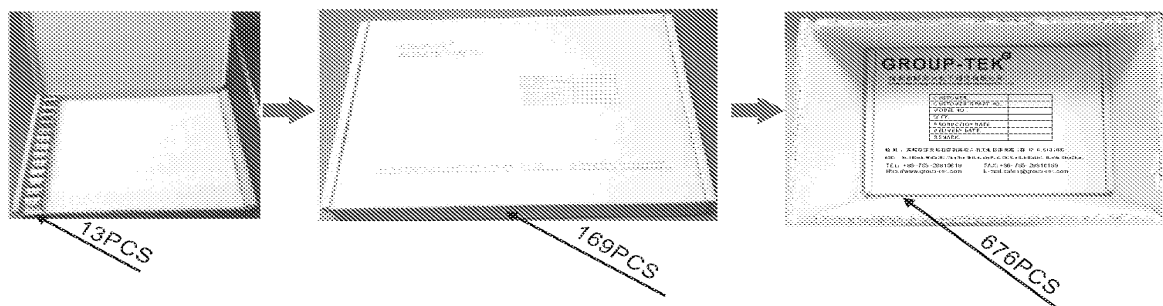
EE1936R

7. Material List

NO.	ITEM.	MATERIALS	SUPPLIERS/MANUFACTURES	UL FILE NO.
1	BOBBIN	PHENOLIC T375J UL RATING: 94V-0	CHANG CHUN PLASTICS CO.LTD.	QMFZ2.E59481
2	CORE	EE 19 PG 232	High-tech Electronics Co.,Ltd	N/A
3	WIRE	POLYURETHANE ENAMELED TYPE NO. 2UEW/ MW62-C THERMAL RATING:180°C	ZHU HAI SUNTEK WIRE COLTD	OBMW2.E234867
4	TAPE	ADHESIVE POLYESTER TAPE TYPE NO.:HMT803(YELLOW) THERMAL RATING:130°C	Shen zhen XinHuaHui Packing material Co.,Ltd	E328315
5	SOLDER	SN/CU: 99.3/0.7	Gao Xin stannum industry Co.,Ltd	N/A
6	Varnish	E962	ZHU HAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO.LTD.	OBOR2.E335405

8. Packing Information:

DESCRIPTION	QTY
PIECES PER CELL	1
PIECES PER TRAY	169
PIECES PER BOX	676
GROSS WEIGHT PER BOX(KG)	7.85
NET WEIGHT PER BOX(KG)	9.25



No.1 Block, WeiTai Rd. Ying Ren Shi Industry Park, Shi Yan Sub-District, Bao An ShenZhen TEL:+86-755-29810619 FAX:+86-0755-29810159 Http://www.group-tek.com

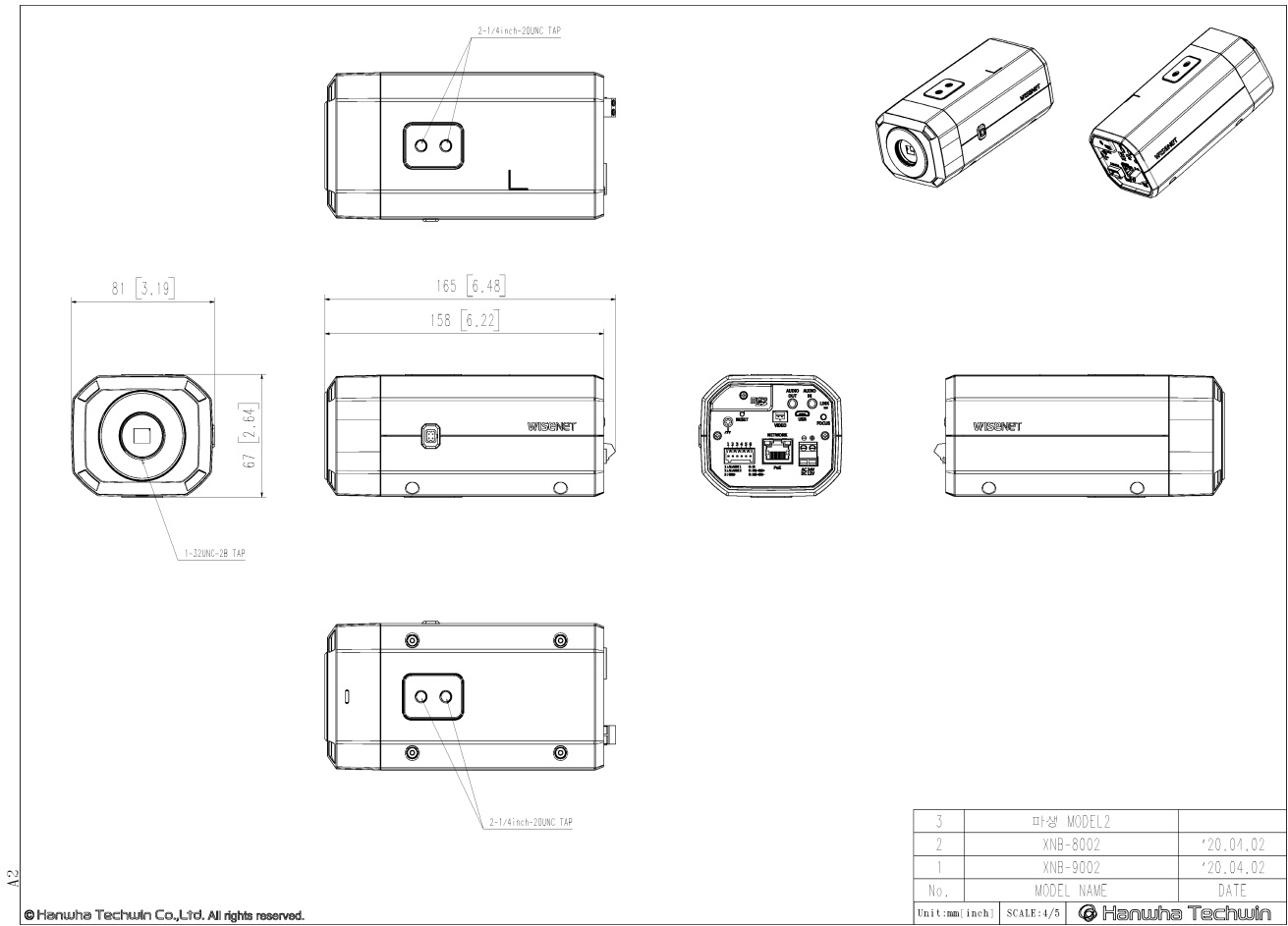


NETWORK CAMERA
MODEL: XNB-8002
AC 24V~ 50/60Hz 0.97A/
DC 12V $\overline{\text{---}}$ 0.96A /
PoE(48V $\overline{\text{---}}$) 0.27A
M/C: XNB-8002/KAN Fac. ID: D
2020.04 S/N: Serial No.
MAC ADDRESS: XX-XX-XX-XX-XX-XX
CAN ICES-3(A)/NMB-3(A)
HANWHA TECHWIN CO.,LTD.
MADE IN KOREA



NETWORK CAMERA
MODEL: XNB-9002
AC 24V~ 50/60Hz 0.97A/
DC 12V $\overline{\text{---}}$ 0.96A /
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MAC ADDRESS: XX-XX-XX-XX-XX-XX
CAN ICES-3(A)/NMB-3(A)
HANWHA TECHWIN CO.,LTD.
MADE IN KOREA





Project No. 4789436104

File E158873

Page 2

Compliance

Review

Conducted by: _____

Printed Name

Signature _____

Date _____

Clause/Par. Reference and Construction Requirement	Comply			Comments/Measurements	Inst. ID No.
	Yes	No	N/A		
Manufacturer has a method to manage distribution of products, IF all products with the Canadian certification mark are NOT going to include the dual language.	X			Evaluation staff are to only verify that the manufacturer has a method to control distribution. Evaluation staff do not have to record the method of control nor are the evaluation staff expected to verify the effectiveness of the method of control. This requirement to verify that a method exists will be noted in the FUS Procedure. The UL Field Engineer will verify the method during surveillance. If the manufacturer is going to include the dual language on all products with the Canadian certification mark, then this item is N/A; no further action required.	N/A

Test Record No. 1

1. Test result relate only to the items tested.
2. The manufacturer submitted representative production samples of NETWORK CAMERA, XNB-9002.
3. Only the test listed were considered necessary.
4. Unless otherwise noted in the above list of tests, all tests were conducted by CTK CO LTD, (Unhak-Dong) 142, Dongbu-ro, Cheoin-gu Yongin-si, Gyeonggi-do 17141 Republic of Korea and witnessed by a member of the UL Staff under WTDP.

The following tests were conducted:

Tests performed (name of test and test clause):	Testing location:
	None
Input: Single-Phase (1.6.2)	
SELV Reliability Test Including Hazardous Voltage Measurements (2.2.2, 2.2.3, 2.2.4, Part 22 6.1)	
Determination of Working Voltage; Working Voltage Measurement (2.10.2)	
Loading - Wall and Ceiling Mounted Equipment (4.2.10)	
Battery (4.3.8)	
Heating (4.5.1, 1.4.12, 1.4.13)	
Component Failure (5.3.1, 5.3.4, 5.3.7)	
The following tests were waived:	Rationale for Waiving

Test results are valid only for the tested equipment. These tests are considered representative of the products covered by this Test Report. The test methods and results of the above tests have been reviewed and found to be in accordance with the requirements in the Standard(s) referenced at the beginning of this Test Report.

The following supplements are provided as part of this Test Record. NOTE: These supplements are only available to the Applicant via the myUL™ Client Portal.

Type	Supplement Id	Description
Attachment	02-01	Datasheet