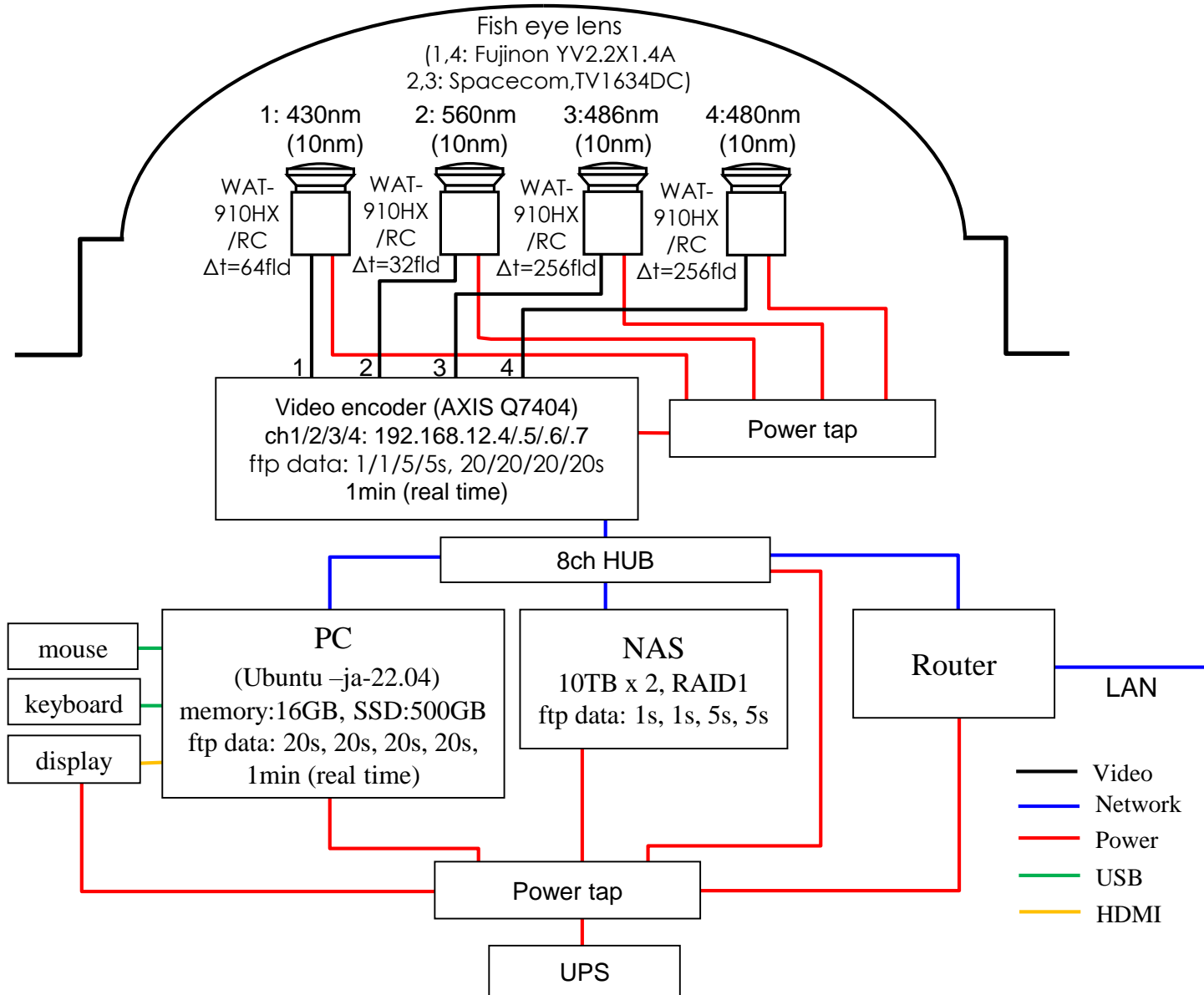


Instrument Name	Watec Monochromatic Imager (WMI)
Observation site	Syowa Station, Antarctica
Observation location	Geographic latitude (deg): -69.00, longitude (deg): 39.58
Observation start	25 February, 2023
Instrument details	<ul style="list-style-type: none"> ■ Camera: 4 sets of Watec WAT-910HX/RC ■ Lens: ch1, ch4: Fujinon YV2.2X1.4A, ch2, ch3: Spacecom,TV1634DC ■ Filter: ch1: Edmund Optics #65-137, ch2: #88-011, ch3: #65-146, ch4: #65-145 ■ Center wave length: ch1: 430 nm, ch2: 560 nm, ch3: 486 nm, ch4: 480 nm ■ FWHM: ch1-4: 10 nm ■ Video encoder: AXIS Q7404
Target auroral emission	ch1: 427.8nm (N ₂ +ING), ch2: 557.7nm (OI), ch3: 486nm (H β), ch4: 480nm (H β -BG)
Data acquisition interval	Original : ch1: 1 sec, ch2: 1 sec, ch3: 5 sec, ch4: 5 sec Archive: ch1-4: 20 sec, Real-time monitor: 1 min
Camera exposure time	ch1: 64 field, ch2: 32 field, ch3: 256 field, ch4: 256 field
Camera settings	GAIN: 41dB, GAMMA: 0.45, 3DNR: ON, LEVEL: 50, SETUP-LEVEL: 7.5IRE
Data type	All-sky image in JPG format
Image pixel resolution	640 (W) x 480 (H), 8 bit depth
Principal Investigator	Name: Akira Kadokura Affiliation: National Institute of Polar Research, Tokyo, Japan E-mail: kadokura(at) nipr.ac.jp
Reference	Polar Science, doi:10.1016/j.polar.2019.100501
Related WEB page	https://polaris.nipr.ac.jp/~aurora/optical.obs/SyowaAuroraObsTop.html

Auroral Monitoring Observation at Syowa Station

■ Watec Monochromatic Imager (WMI)



Optical Instruments at Syowa Station in 2023

