



# Core equipment in BPIVL

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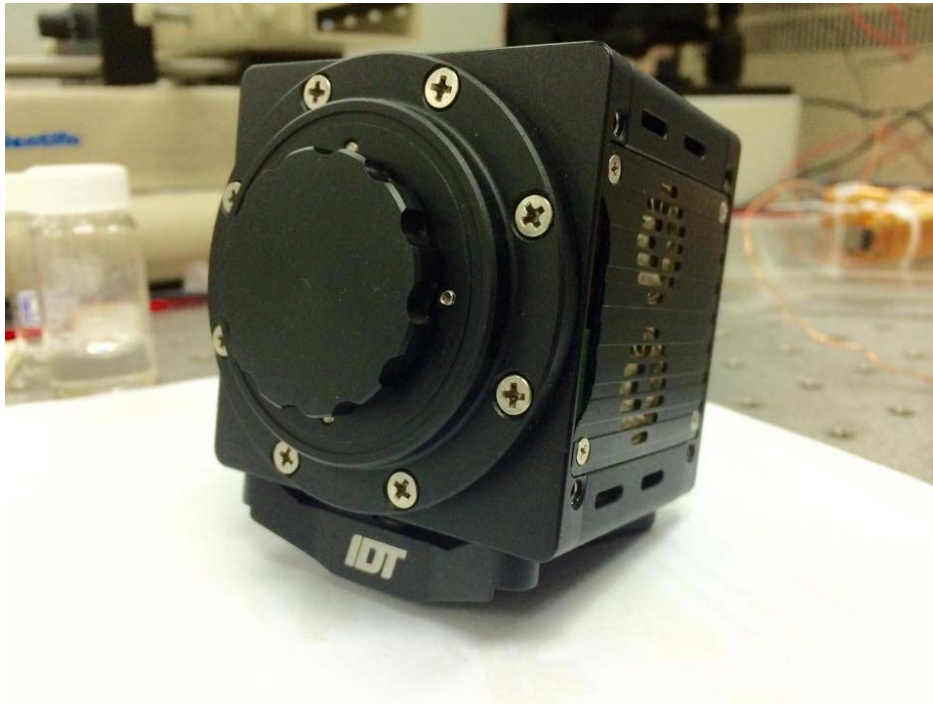


# Overview

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- High speed camera
- Double-pulsed laser
- Microscope
- CNC three-axis micro-engraving machine
- Fish culturing system
- Oxygen plasma

# High speed camera



## IDT NX4-S2

### ● Specifications:

- Resolution: 1024 x 1024 pixel  
(Max FPS @ Max Res: 2000 fps @ 1024 x 1024)
- Minimum exposure time: 1  $\mu$ s
- Sensor type: CMOS – Proprietary
- Sensor size: 13.9 x 13.9 mm
- Pixel size: 13.68x13.68  $\mu$ m

# Double-pulsed laser



## Quantel laser YAG70-15-QTL

### ● Specifications:

- Dual cavities
- Energy output: 70 mJ (x2)
- Repetition rate : 15 Hz
- Wavelength output: 532 nm
- Optical laser head dimensions:  
102 x 400 x 151 mm
- Integrated cooling and electronic dimensions:  
406 x 500 x 236 mm

# Microscope



## Olympus BX60

### ● Specifications:

- Transmitted and reflected light paths applications
- Epi-Fluorescence:  
100 Watt Mercury Illuminator
- Filter cube:
  - ① BP480~550 nm  
BA590 nm
  - ② BP360 nm  
BA420 nm

# CNC three-axis micro-engraving machine



## ● Specifications:

- X-axis travel: 200 mm
- Y-axis travel: 200 mm
- Z-axis travel: 100 mm
- Spindle: 4 bearing water cooling spindle
- Max. spindle speed: 36,000 rpm
- Positioning accuracy: Within +/-0.008 mm
- Fast Displacement: 5000 mm/min
- Rapid feed: 3000 mm/min

# Fish culturing system



## TAIKONG CORP

- Specifications:
  - Self-cleaning tanks
  - Total tanks number: 48 (3L)
  - Independent switch for each regulating valves
  - Efficient control system:
    - ① UV disinfection system
    - ② Flow detection alarm system
    - ③ Water Treatment
    - ④ Photoperiod lighting system

# Oxygen plasma



## HARRICK PLASMA PDC-32G

### ● Specifications:

- Chamber size: 3" diameter by 6 1/2" long
- Applies a maximum of 18W to the RF coil
- 1/8" NPT needle valve to control gas flow and chamber pressure
- 1/8" NPT 3-way valve to quickly switch from bleeding in gas