

# Leica HyD for Confocal

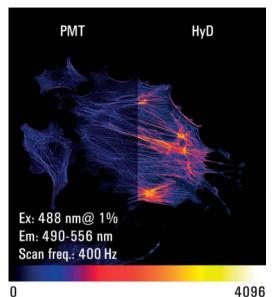
### The road to super-sensitivity

- Improved cell viability
- Reduced acquisition time
- Open upgrade path



MICROSYSTEMS

## Pushing Sensitivity to a New HyD





#### Hybrid technology – the best of both worlds

Half photomultiplier and half avalanche photodiode our new Hyd **hybrid detectors** with a **GaAsP** photocathode offer superior **sensitivity** combined with a large **dynamic range**. Start observing dim structures never seen before.

#### Flexibility by design

No matter if you need hybrid technology fully **multi-spectral**, in the **non-descanned** position or at the **extension port** – HyD is available in either format.

#### Improved cell viability

Every increase in sensitivity directly translates into reduced light dosage delivered to the sample. You can perform your live cell experiments without worrying about photobleaching or phototoxicity.

#### Filter free super-sensitivity

The HyD SP modules seamlessly integrate into Leica's distinguished spectral detection design, resulting in full flexibility with the **AOBS** – the only true **filter free** detection concept. Don't bother with 100 filter combinations. Why limit yourself if you can have thousands?

#### Fastest super-sensitive point scanner

Leica Microsystems — the pioneer of rapid point scanning technology sports a unique frame rate of **29 fps at 512 x 512 with the widest field of view** (FOV $_{resonant\ scanner} = 15\ mm$ , FOV $_{conventional\ scanner} = 22\ mm$ ) available. **Parallax free imaging** thanks to Leica's patented three mirror scanner. Combine now the power of rapid scanning with **low noise hybrid detection**.

#### Dynamic range from single photon to whole organism

The combination of HyD detection with PMTs in the same system offers a dynamic range from single photon counting to whole organism imaging. Effectively, this obsoletes the use of processing tools, such as high dynamic range software.

#### Open upgrade path

Start with **up to four HyD modules** or **retrofit your existing SP5** system. Leica's modular concept allows you to buy just as much super-sensitivity as you need.







