User Case 2:
Testing upconversion mid-infrared photon counting LIDAR

User provided the detection and a gated electronic counter system and needed a source of picosecond mid-infrared pulses and a custom optical frequency upcoverter to perform characterization of the complete LIDAR system. KTH Laser lab provided the MIR source and built a custom diode-pumped solid-state laser for upconversion. Joint measurement were performed (2 days) using this dedicated setup. The user covered additional development costs. The measurement campaign results have been later published, *See Appl. Opt., 59., 2365 (2020).*

Schematic setup