



For industrial purposes and support of large scale prototyping and production





## Ultimate control



- Temperature sensors

  to control the temperature of the extruder,
  platforms, chamber and detection of
  electronics overheating
- The platform calibration sensor precise calibration of the distance from the platform
- Axial optical endstops
  repetitive positioning of the extruder on each axis
- Fan stop sensors fan failure detection
- Extruder sensor
  the printer detects disconnection or extruder problems
- Camera
  for monitoring the printing process remotely



## Ultimate control



- Force sensors for filament weight current information on how much filament remains on the reel
- Filament presence sensors information about the lack of filament
- Filament jam sensors

  detection and indication of filament jam
- Air humidity sensor
  maintaining constant, low humidity in the
  filament chamber
- Blackout response system
  for detection of a power outage and
  resuming the printing from the same spot
  when the power is back on
- Supply voltage sensor detecting 110V / 230V

  the printer adjusts the method of power

the printer adjusts the method of power distribution to heaters depending on supply voltage



## PEEK filament



A steel pipes' holder. High abrasion resistance and tolerance to a wide range of temperatures make PEEK the right choice for steel pipes' holder.

Unique combination of mechanical properties: resistance to chemicals, wear and tear and abrasion.

- Exceptionally resistant to high temperatures of up to 250°C
- Can be used in manufacturing durable parts able to survive longer in harsh environments
- Tensile strength approx. 100 MPa, i.e. 1/3 of the strength of aluminum
- Once sterilized, 3D printed PEEK models can work in medical prototyping



## Polymers Reinforced with Carbon-Fiber



An LS accessory bracket. Carbon fiber reinforces the polymer's structure which makes it strong enough for accessory brackets in LS engines.

Polymers reinforced with carbon-fiber have excellent mechanical properties and can work in heavy-duty, functional parts.

- Their stiffness and tensile strength can be over 1.5 times higher than Z-NYLON, with better resistance to high temperatures reaching 120°C and higher
- Such materials achieve matt, porous surface in prints and possess anti-static properties
- They can be used in all sorts of industries, wherever high rigidity is required in relation to the component weight

