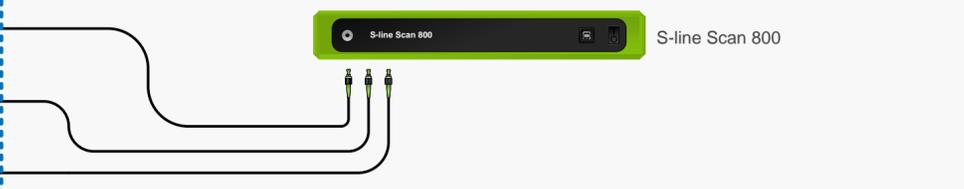
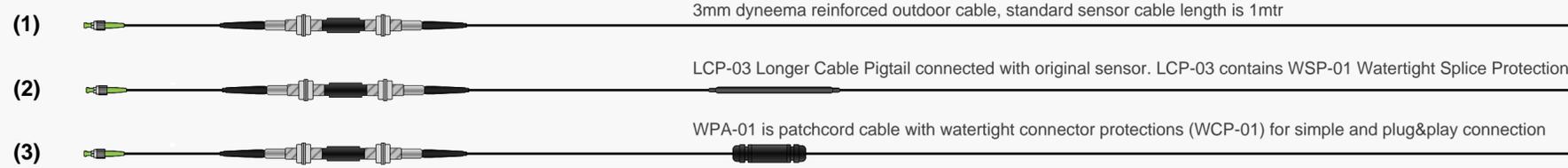


# FBG monitoring system – connection possibilities

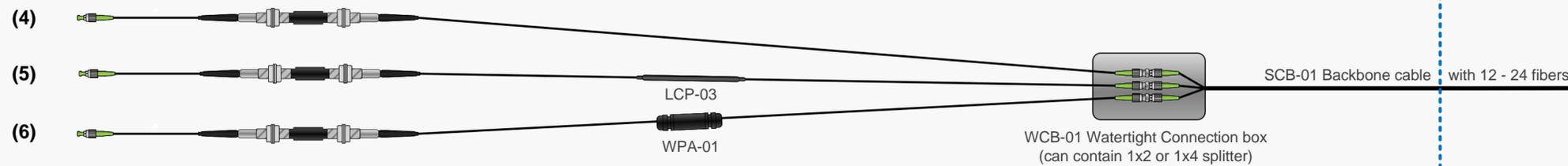
## OUTDOOR / HARSH ENVIRONMENT (no power supply needed)

## INDOOR or OUTDOOR CABINET (standard power supply required)

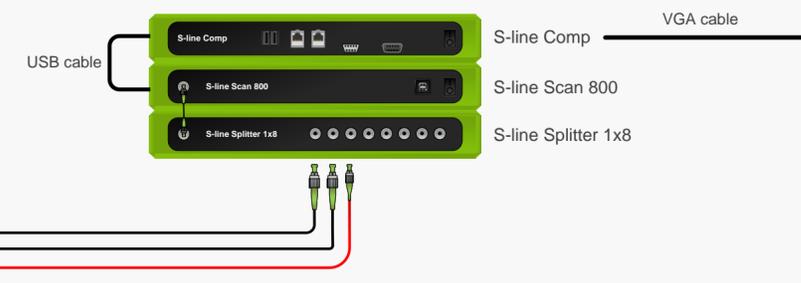
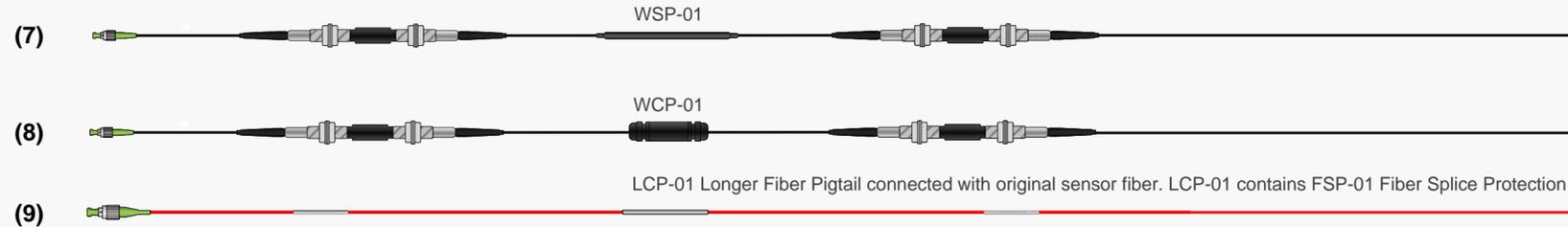
### Cable length extension possibilities for direct Sensor-Interrogator connection



### Cable length extension possibilities when using Connection box and Backbone cable



### Daisy-chaining sensors at installation (can be combined with Connection box and/or Splitter)



- S-line Scan** – FBG Interrogator with one optical port.
- S-line Switch** – Active multiplexer switching between multiple optical ports. If in use, must be always stacked on the interrogator.
- S-line Splitter** – Passive divider and combiner of optical fibers. Can be used anywhere in the cable network or with the interrogator.
- S-line Comp** – Can be replaced with customer's PC or laptop (Win 7,8,10).

## Legend

### Cable length extension possibilities for direct Sensor-Interrogator connection

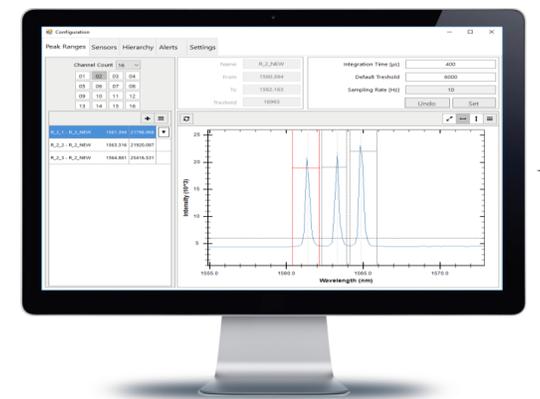
- (1) Standard sensor cable length is 1mtr, longer lengths on demand and subject to longer lead times
- (2) Standard sensor cable length extended with LCP-03 which is a spliced-in longer cable length. Must be done at the factory
- (3) Standard sensor cable length extended with WPA-01 which is a patchcord with water-tight connectors. The most recommended and plug&play solution at installation

### Connection box together with Backbone cable improve the flexibility of cable network. This reduces the volume of cables and associated installation efforts. Connection box can also contain Splitter modules.

- (4) The same like (1) but via Connection box
- (5) The same like (2) but via Connection box
- (6) The same like (3) but via Connection box

### Daisy-chaining of multiple sensors into one optical channel. This is highly recommended to reduce the volume of cables and associated installation efforts. Splitter module can also be located at interrogator location.

- (7) The same like (2) but with multiple sensors daisy-chained together via WSP-01 Watertight Splice Protection
- (8) The same like (3) but with multiple sensors daisy-chained together via WCP-01 Watertight Connector Protection
- (9) The same like (2) but for sensors based on 900um fibers. Can be as well daisy-chained for multiple sensors like (7) but based on FSP-01 Fiber Splice Protection



- Sentinel 2.0 Measurement and project setup SW**
- Always installed on S-line Comp or on customer's laptop
  - Monitor and VGA cable are standardly not supplied