PWM - Pulse Width Modulation

PWM has been around for a long time in the radio control hobby and is the protocol that your ESC's and servos talk to each other on. The analogue signal takes the form of a pulse, and the length of the pulse represents a specific value, with 1000 being minimum, and 2000 being the maximum value.
Each channel has its own single wire, so if you have an 8-channel receiver you will need to connect 8 wires to read the inputs into your flight controller.

PPM - Pulse Position Modulation

PPM is also an analogue signal, but instead of using a separate wire for each channel, PPM stacks each signal one after another to send them all along the same wire. This makes wiring your R/C Receiver to your autopilot much easier! Other variations of PPM include CPPM, and PPMsum which are slight variations introduced by specific manufacturers.

Some autopilots such as the Pixhawk require a PPM (or SBUS) input so if you are using a PWM receiver you will need to use a PPM encoder which converts several PWM signals into a single PPM output.

SBUS - Serial Bus (S.BUS)

SBUS, as the name suggests is a serial communication protocol. This was introduced by Futaba, but is commonly used by many FrSky products too. In addition to being a digital signal, the main advantage of Sbus is that it can support up to 18 channels using just one signal cable!

IBUS (flysky)

Similar to, SBUS, IBUS is a new digital serial protocol developed by flysky and will be used on many of their new products going forward (such as the FlySky FS-i6X 546). It is a two way protocol which means that it can send and receive data, so your radio can send data to your aircraft receiver, and the receiver can send data back to your transmitter such as battery voltage.