WHAT IS CLAIMED IS:

[Claim 1] An optical sensor module comprising:

an optical detecting part having at least two optical detectors spaced apart from each other;

a transmission filter part disposed over the optical detecting part and having at least two transmission filters; and

a filter holder part disposed over the optical detecting part, the transmission filter part being mounted on the filter holder part,

wherein the transmission filters are spaced apart from each other and respectively disposed over the optical detectors,

wherein the transmission filters are disposed with different angles with respect to an incident light.

[Claim 2] The optical sensor module of claim 1, wherein upper surfaces of the filter holder part extend with inclined angles different from each other, and the transmission filters are respectively mounted on the upper surfaces of the filter holder part.

[Claim 3] The optical sensor module of claim 2, wherein a normal line of each of the transmission filters forms an acute angle with respect to the incident light.

[Claim 4] An optical sensor module comprising:

a module receiving part configured to form a receiving space, an incident portion into which a light is incident being formed in a first side surface of the module receiving

part;

a splitter part disposed in the receiving space, and having at least one splitter configured to split an incident light;

an optical detecting part having optical detectors disposed at a second side surface and a third side surface, the second side surface facing the first side surface, the third side surface being adjacent to the first side surface; and

a transmission filter part disposed between the splitter and the optical detector, and having transmission filters having inclined angles different from each other with respect to the optical detector.

[Claim 5] The optical sensor module of claim 4, wherein each of the splitters comprises:

an incident surface disposed toward the incident light;

a first surface disposed toward the third side surface; and

a second surface disposed toward the second side surface.

[Claim 6] The optical sensor module of claim 5, wherein the transmission filter part comprises:

a first transmission filter extending parallel with the third side surface;

a second transmission filter inclined with respect to the second side surface by a predetermined angle.

[Claim 7] The optical sensor module of claim 5, wherein the splitter part comprises a plurality of splitters arranged along a direction of the incident light.

[Claim 8] The optical sensor module of claim 7, wherein the transmission filter part comprises:

a plurality of first transmission filters inclined with respect to the third side surface; and

a plurality of second transmission filters extending parallel with the second side surface.

[Claim 9] The optical sensor module of claim 8, wherein angles of the first transmission filters with respect to the third side surface are different from each other,

wherein an angle of each of the first transmission filter with respect to the third side surface is an acute angle.

[Claim 10] The optical sensor module of claim 7, wherein the optical detecting part comprises:

a plurality of first optical detectors spaced apart from each other on the third side surface, in the same number as the number of the splitters; and

a single second optical detector disposed on the second side surface regardless of the number of the splitters.

[Claim 11] A process monitoring system having the optical sensor module of claim 1,

wherein among the transmission filters, the transmission filter having a first inclined angle transmits an emission optical signal in an emission optical signal band, and

the transmission filter having a second inclined angle transmits a background signal in a background signal band,

wherein the process monitoring system comprises a signal processor configured to calculate a pure emission optical signal in which the background signal is removed, based on the emission optical signal and the background signal.

[Claim 12] The process monitoring system of claim 11, wherein the first and second inclined angles are determined to be changed with each other, according to the emission optical signal band and the background signal band.

[Claim 13] An optical sensor module comprising:

a module receiving part configured to form a receiving space, an incident portion into which a light is incident being formed in a first side surface of the module receiving part;

a splitter part disposed in the receiving space, and having at least one splitter configured to split an incident light;

a transmission filter part having at least two transmission filters arranged along a direction perpendicular to a direction of the incident light, the transmission filters being configured to transmit predetermined signals of different bands; and

an optical detecting part having at least two optical detectors respectively arranged with the transmission filters, the optical detectors being configured to detect a light passing through the transmission filters.

[Claim 14] The optical sensor module of claim 13, wherein the transmission

filters are spaced apart from each other, a full width at half maximum (FWHM) of each of the transmission filters is 10 nm or less, and a size of each of the transmission filters is larger than that of each of the optical detectors.

[Claim 15] The optical sensor module of claim 13, wherein the splitter part comprises:

a first splitter receiving the incident light; and

at least one additional splitter receiving a light split from the first splitter.

[Claim 16] The optical sensor module of claim 15, wherein the first splitter is disposed at a first side of the module receiving part to be aligned with the incident light,

wherein the additional splitter is spaced apart from the first splitter by a predetermined distance and is arranged along an arranged direction of the transmission filters.

[Claim 17] The optical sensor module of claim 16, wherein as the light is split and provided from the first splitter to the additional splitter, an amount of the light incident into each of the transmission filters is changed.

[Claim 18] The optical sensor module of claim 13, wherein the first splitter is disposed at a center of the module receiving part to be arranged with the incident light,

wherein the additional splitter is spaced apart from the first splitter along a direction of the incident light, and at least two additional splitters are arranged to be perpendicular to the direction of the incident light.

[Claim 19] The optical sensor module of claim 18, wherein the additional splitters are respectively arranged with the transmission filters, and an amount of the light incident into each of the transmission filters from each of the additional splitters is uniformly maintained.

[Claim 20] A process monitoring system having the optical sensor module of claim 13,

wherein each of the transmission filters transmitting signals in different bands is configured to transmit an emission optical signal in an emission optical signal band and a background signal in a background signal band,

wherein the process monitoring system comprises a signal processor configured to calculate a pure emission optical signal in which the background signal is removed, based on the emission optical signal and the background signal.