
光電界センサヘッド (SH-10MS)

Optical E-field Sensor Head (SH-10MS)

Ver.1.0

November 01, 2019

Seikoh Giken Co., Ltd.

1.適用 Scope

本仕様書は光電界センサヘッドに適用する。

This specification applies to Optical E-field Sensor Head.

2.型名 Product code

Table 1

Product code	Remarks
SH-10MS	—

3.環境条件 Standard operating conditions

Table 2

Item	Specification				Remarks
	Min.	Typ.	Max.	Unit	
Operating temperature range	20		30	°C	—
Operating humidity range	45		90	%RH	Refrain from dew condensation
Storage temperature range	-20		60	°C	—
SET-up location	Indoor use only				—

Note : Refrain from dew condensation

4.定格 Rating

Table 3

Item	Specification				Remarks
	Min.	Typ.	Max.	Min.	
Frequency range	0.1		10,000	MHz	—
Absolute maximum rating of E-field strength*1			1,000	V/m	—
Number of Optical fiber	1				—
Optical I/O connector	SC/APC				—
Optical fiber length	1.0±0.1m				φ2mm
Case material	Polycarbonate				—

*1 : 長時間強電界にさらされると、光ファイバの樹脂被覆ならびに筐体が加熱して溶融することがあります。詳細はお問い合わせ下さい。

*1: When the Noise leak detector head is exposed to the strong E-field environment for a long time, the optical fiber coating and the case might be melted by the absorption.

5.外観図 External

付図 : SOEFS-E033-01による。

The probe head is shown in Fig. SOEFS-E033-01

6.性能 Performance*2

1)標準コントローラ(精工技研標準機)と光ファイバコード(SMF,10m)との組み合わせ性能

Combination performance with standard controller (Seikoh Giken standard) and with optical fiber code (SMF,10m).

Table 4

Item		Specification				Remarks
		Min.	Typ.	Max.	Min.	
Frequency range		0.1		10,000	MHz	—
Measurement E-field strength*2	<300MHz	0.3		500	V/m	S/N when minimum input: ≥6dB @301MHz (RBW:10Hz VBW:1Hz) when maximum input: Design certification
	≥300MHz	0.01				

*2: 本光電界センサは国際標準にトレーサブルではありません。トレサビリティが必要な場合には、ご相談下さい。

*2: This Optical E-field sensor is not traceable to international standards. The traceability is required of it, please contact us.

2機械的性能 Mechanical Performance*3

Table 5

Item	Test Method*3	Specification
Impact Resistance	Fall height : 1m Thickness of colliding hardwood : 50mm 3 drops 3 tests	The variation amount of optical insertion loss : ±0.5dB MAX
Swing impact Resistance	Swing length : 1m Thickness of colliding hardwood : 50mm 3 drops 1 tests	
Tensile Resistance	Static load due to weight equivalent to 36 N. Retention time : 1 minute	
Flexing resistance	Flexion angle: ±45 degrees Load: static load 2.5 N Number of flexion: 5,000 times	
Chassis rigidity	Load: 20 N Pushing tip shape: φ12 mm hemisphere Number of pressing: 3 times	

*3:上記項目は機械強度試験項目です。各項目負荷の1/2未満でご使用ください。

*3: The above items are mechanical strength test items. Please use less than half the load in each item.

7.検査 Inspection

別途打ち合わせによる。

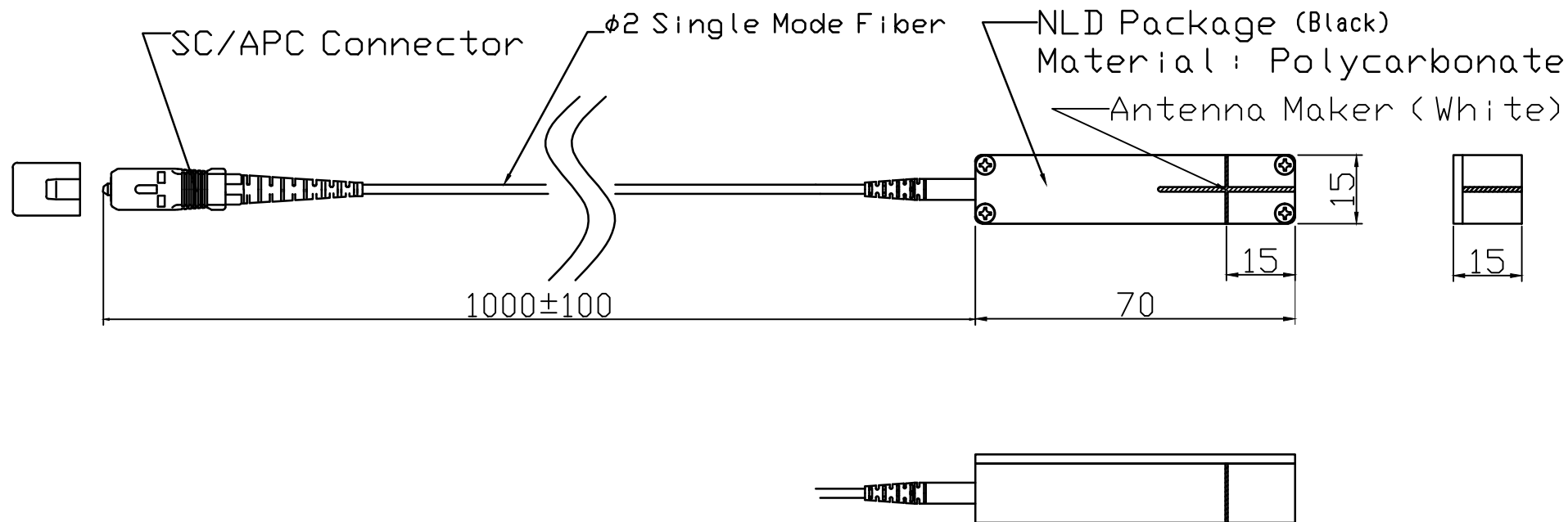
To be discussed.

8.保証 Warranty


本製品に関し、構成部品の故障や製造上の欠陥に対して納入日から1年間無償修理保証致します。但し、本保証は製品の正常な使用において発生した故障のみに適用致します。

SEIKOH GIKEN warrants the Noise leak detector heads against defects in parts and workmanship for one full year from B/L date.

This warranty shall be invalid by any abuse, misuse, misapplication or improper installation.



*Antenna Marker
 Antenna direction : 1 mm width line
 Center of antenna : Intersection of lines

Rev.	DESIGN CHANGE	Date	2019.10.31	TITLE:	SH-10MS type Optical E-field sensor head External
		Rev.	1.0		
		UNIT	[mm]		
		SCALE	Free		
		TOLERANCE	±1	DWG.No.:	S0EFS-E033-01
		APPROVED	Y.Toba		
		CHECKED	J.Ichijou		
		DRAWN	T.Yamauchi		
					SEIKOH GIKEN Co.,Ltd.