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# C7 シリーズコントローラ

C7 series Controller

Ver.2.0

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August 8, 2023

Seikoh Giken Co., Ltd.

**1.適用 Scope**

本仕様書はC7シリーズコントローラに適用する。

This specification applies to C7 series Controller.

**2.型名 Product code**

Table 1

Product code	Remarks
C7-E1-A	Frequency range : 0.1 to 10,000MHz

**3.付属品 Accessories**

Table 2

Item	Quantity	Remark
AC adapter	1	For controller(DC Supply 24V)
Rack mounting bracket	1	—
Plug type FBG	3	For Fiber Insertion Loss Check
Endface Cleaner(SFM2.0-250)	5	Ferrule endface cleaning for inner adapter or single connector

**4.環境条件 Standard operating conditions**

Table 3

Item	Specification				Remarks
	Min.	Typ.	Max.	Unit	
Operating temperature range	0		40	°C	—
Operating humidity range	45		90	%RH	—
Storage temperature range	-20		60	°C	—
SET-up location	Indoor use only				—
Warm up time	Over 1hr				—

Note : Refrain from dew condensation

## 5. 定格 Rating

Table 4

Item	Specification				Remark	
	Min.	Typ.	Max.	Unit		
◆Part of light source						
Laser type	DFB-LD (Double polarization)				—	
Wavelength	LD1,2	1545		1555	nm	—
	LD3		1530		nm	For Fiber Insertion Loss Check
Input / Output port	3 ports				3 ports Input / Output simultaneously	
◆Part of O/E						
Frequency range	0.1		10,000	MHz	—	
RF Output port	3 ports				3 ports Output simultaneously	
Output impedance	50			Ω	—	
Wavelength	1280		1580	nm	—	
Optical input level		8		dBm	—	
Responsivity		0.6		A/W	—	
Opt. alarm(Input level)		-14		dBm	Normal : Green (LED) Abnormal : Red (LED)	
◆STATUS						
LD1,2 (LD Output Level Check)	-3			dB	Normal : Green (LED) Abnormal : OFF	
LD3 (LD Output Level Check)	-1.5					
FIBER (Fiber insertion Loss Check)			2	dB	Normal : Green (LED) Abnormal : OFF	
PD (PD Input Level Check)	5		10	dBm	Normal : Green (LED) Abnormal : OFF	
RF AMP (RF AMP Check)	Normal : RF AMP "OK"				Normal : Green (LED) Abnormal : OFF	
◆Others						
Laser safety	Automatic LD shut down				The "Opt Alarm" indicator illuminates green during normal operating conditions. If the system detects a bad fiber connection, the Optical Alarm will display as red and the laser source will shut down until the connection is properly made or the connector is properly cleaned.	
Input AC voltage	90		250	V	for AC Adaptor, 100W max	
Weight			11	kg	—	
RF output connector	N/J				—	
Optical I/O connector	SC/APC				—	
Optical monitor terminal (EDFA IN)	BNC/J				—	
Optical monitor terminal (PD IN)	BNC/J				—	
AC Power connector	IEC60320 C14				—	

## 6.性能 Performance

Table 5

Item		Specification				Remark
		Min.	Typ.	Max.	Unit	
Optical output level	LD1,2	11.5		14.5	dBm	—
	LD3		3		dBm	—
Wavelength	LD1,2	1545		1555	nm	—
	LD3		1530		nm	—
Output return loss		7			dB	—
Gain (Output/Input)		-4			dB	Combination evaluation with the standard machine.
Gain deviation				10	dBp-p	

## 7.外観図 External

付図: SOEFS-E040-01による。

The controller is shown in Fig.SOEFS-E040-01.

## 8.検査 Inspection

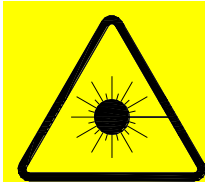
別途打ち合わせによる。

To be discussed.

## 9.セーフティーインフォメーション Safety information

本製品は不可視レーザー光を使用しておりますので、誤ってレーザー光を目に入れますと失明する危険性があります。直接レーザー光を見ないようにして下さい。

This product uses a laser light that is not visible to the human eye, but can cause serious injuries or permanent loss of vision. Please exercise proper caution and do not look directly into the laser light as it may cause blindness.



**Class 1 Laser System ( Embedded Class 3R Laser )**

**INVISIBLE LASER RADIATION**

**1550nm 20mW Interlocked**

## 10.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いたします。  
次に該当する故障の場合は保証対象外とさせていただきます。

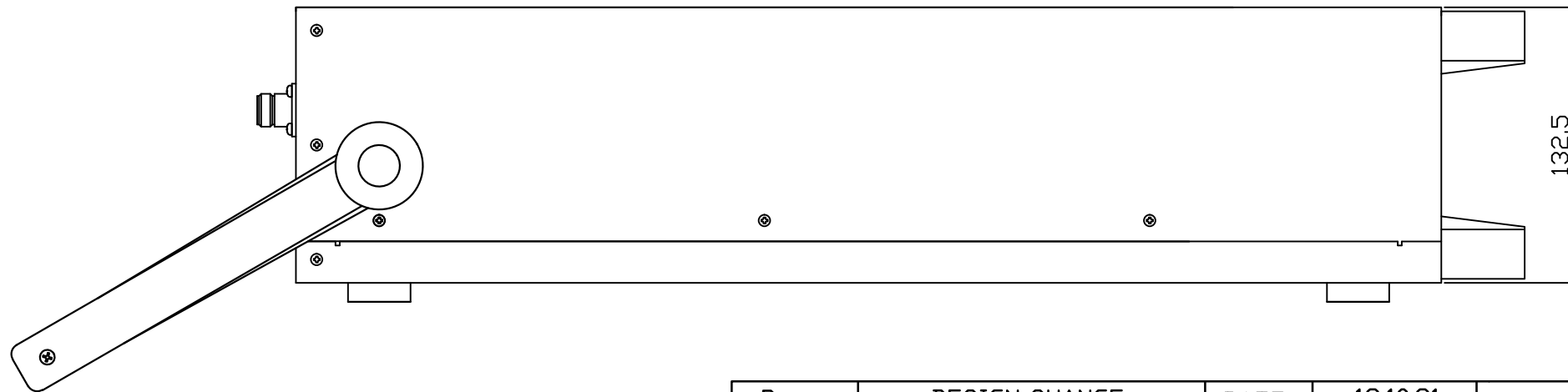
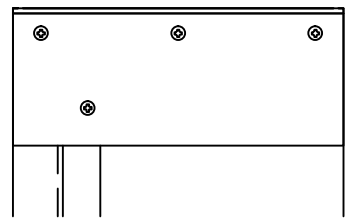
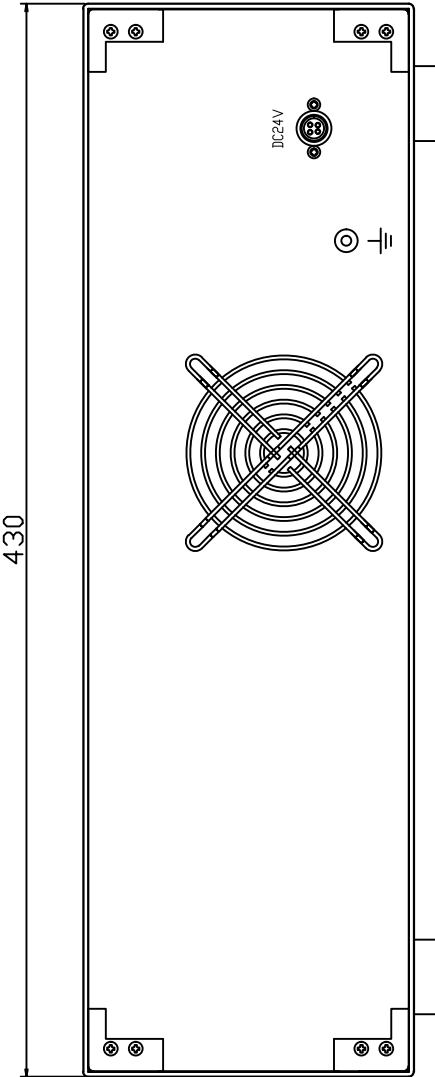
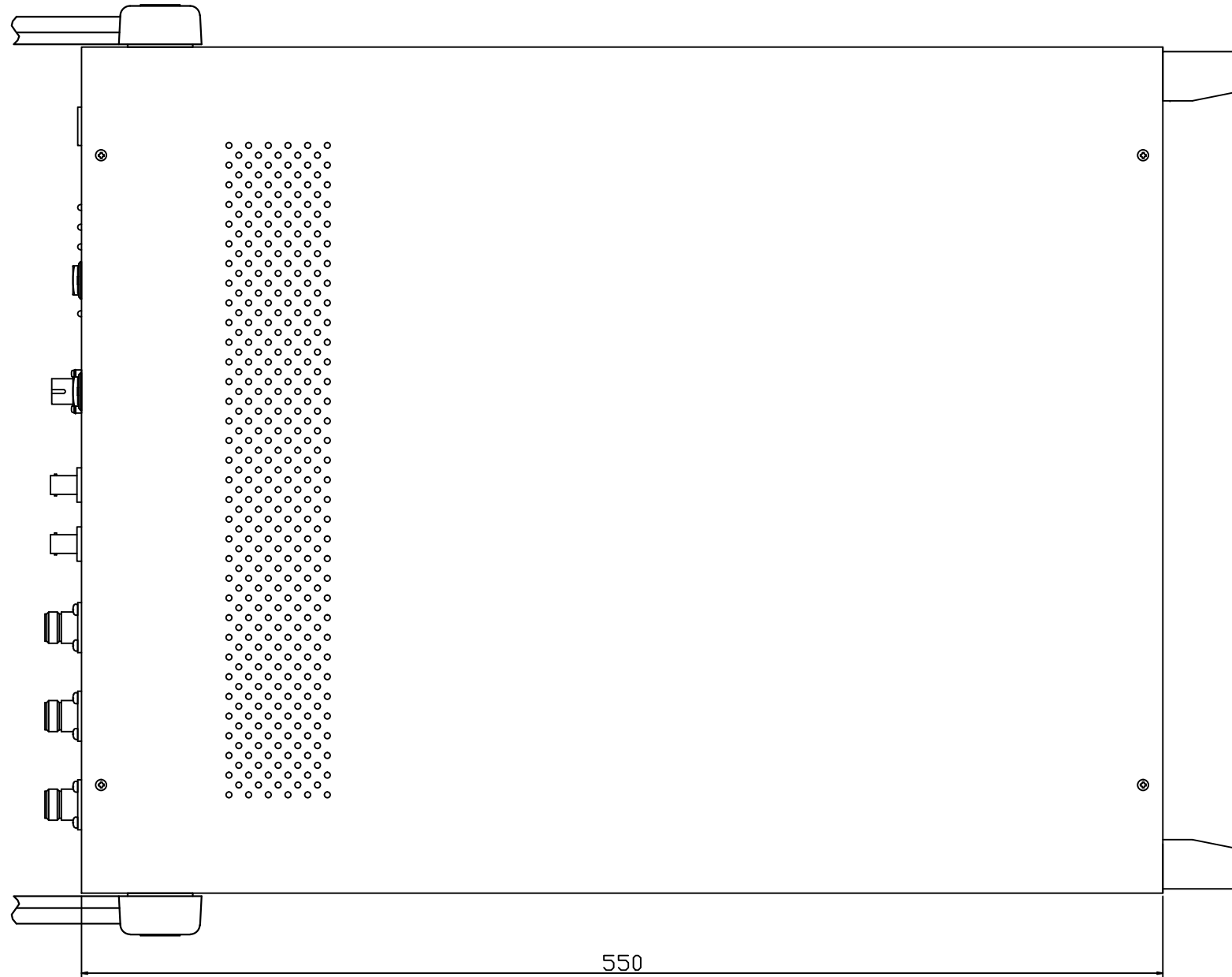
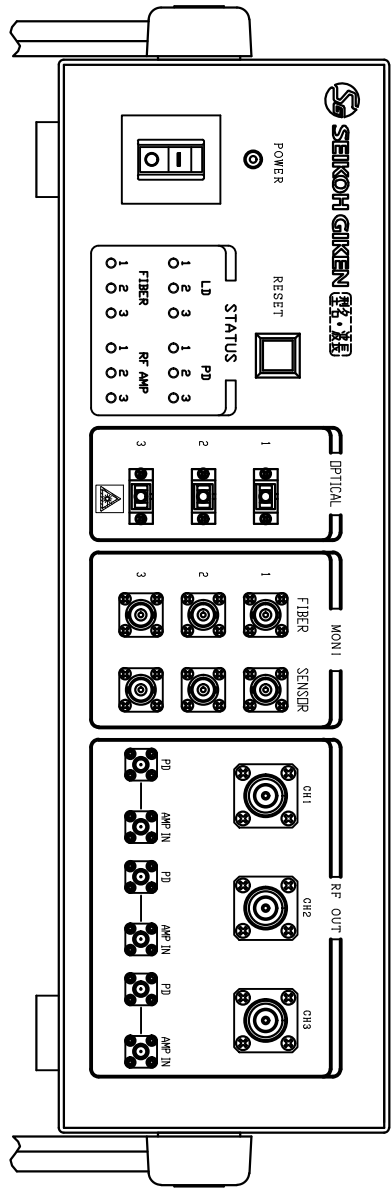
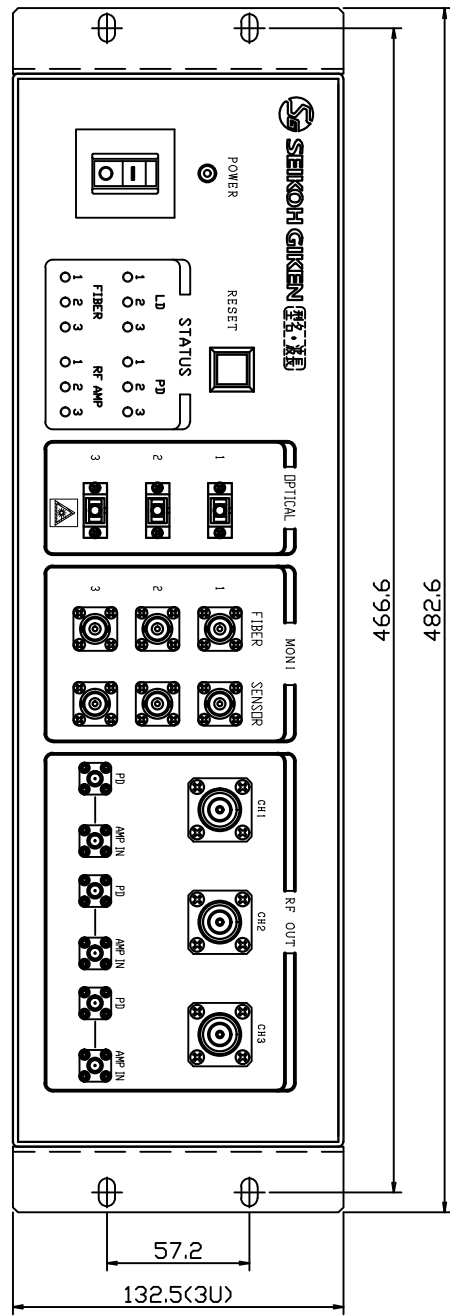
- 1) 取り扱い上の誤り、過失による故障
- 2) 当社以外による改造や修理による故障
- 3) 落下、衝撃等の偶発的事故による故障
- 4) 自然災害による故障
- 5) 取扱説明書、別途取り交わした仕様書などに記載された以外の不適切な取り扱い、  
過酷な環境・条件に起因した故障
- 6) その他、当社が想定できない外部要因による故障

In one year after the arrival of the product, we will guarantee to repair free of charge.

However, this guarantee is limited in the malfunction which is followed according to this Operation Manual or which is obviously responsible for us.

Also following cases is not adapted to our guarantee although in the guarantee period.

- 1) Damage caused by the miss of operation.
  - 2) Damage caused by a repair or calibration carried out by user side.
  - 3) Damage caused by an accidental shock at user's side.
  - 4) Damage caused by natural disaster.
  - 5) Damage caused by wrong operation and tough condition which is not written in  
"Operation Manual".
  - 6) Damage caused from an other outside accident.
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Rev.	DESIGN CHANGE	DATE	19.10.31	TITLE	C7 Series Conttroller UNIT External
		Rev.	1.0		
		UNIT	[mm]	DWG.No.	S0EFS-E040-01
		SCALE	FREE		
		APPD.	Y.Toba		
		CHECKD	M.Onizawa		
		DRAWN	T.Yamauchi		