

Product specification

Senseair Workplace

Alcohol Screening



1. General

The purpose of Senseair Workplace is to determine breath alcohol concentration in human exhalation. Senseair Workplace is designed to be used on site at the workplace as screening instrument for sober check-in to reduce risks due to work under the influence of alcohol.

Senseair Workplace is designed for indoor alcohol screening. Areas of use:

- When accessing vehicle keys. Senseair Workplace can be integrated with advanced key cabinet solutions.
- Entering a control room or high-risk area.
- Connected to an entrance barrier, for control of vehicle drivers entering a site.
- SafeStart prepared, contact Senseair for information on SafeStart

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2. Key technical specification

2.1. Specification valid for all Senseair Workplace configurations

Table 1: Key technical specification

Item	Senseair Workplace
Article number	008-15-0011 and 008-15-0013
Measurement unit	BrAC, mg/L ¹
Measurement method	Contactless (mouthpiece-free)
Operating principle	Non-dispersive infrared (NDIR)
Area of use	Indoor usage
Installation	Wall mounted or Tabletop mounted
Operating range	-20–70 °C, 0–95% RH (non-condensing)
Storage environment	-40–75 °C, 0–95% RH (non-condensing), indoor
IP rating (handset and accessbox)	IP40
Measurement range, BrAC ²	0–4 mg/L
Accuracy BrAC	±7.5% of reading or ±0.015 mg/L, whichever is larger ³
Precision BrAC	5% of reading or 0.015 mg/L, whichever is larger ³
Pressure dependence	Internally compensated in the range 80 kPa... 110 kPa
Power supply	Input: 100–240 V, 50/60 Hz
Maximum power consumption	120 W
IC Card standard	MIFARE Classic ⁴
Dimensions (L x W x H) ⁵	Wall mounted: 300 x 111 x 300 [mm] Tabletop mounted: 300 x 170 x 298 [mm]
Weight	3.3 kg
Weight table stand	0.160 kg
Screen display	LCD Color Display 2.4"
Compliance	SAE-J3214 (Compliance measurement performance) CE-mark RoHS Directive 2011/65/EU Reach regulation 1907/2006 Electrical and Electronic equipment Directive (WEEE) 2012/95/EG Prop65 PSE (Power supply, power cord) FCC (Hand unit) ⁷

Item	Senseair Workplace
Capacity ⁶	6 seconds per test
Service interval	12 months
Consumables	Particle filter

Note 1: BrAC: Breath Alcohol Concentration (mg/L): This is the primary means of expressing the breath alcohol concentration. The mass concentration of ethanol, expressed in mg/L (milligram of ethanol per litre breath air)

Note 2: Values above 4.00 mg/L of alcohol is never displayed. The displayed range is BrAC Masking to 4.00 mg/L.

Note 3: Accuracy and precision are defined according to chapter 7 of SAE J3214.

Note 4: Not in use for some variants, see section 2.2 Specification per configuration. To fully meet MIFARE Classic, an external RFID reader may be required.

Note 5: See detailed figures in section Dimensions.

Note 6: The interval for test and recovery from residual gas (total time for one user). The sensor will go in standby mode after 10 minutes when not in use. When starting a test from standby mode it takes appr. 11 seconds before the breath test can be performed.

Note 7: Valid for Part number 008-15-0013.

2.2. Specification per configuration

Senseair Workplace is available in some different configurations, specified with additional part numbers. See below table for the differences in specification.

540-00013 – 540-00017 are factory default configurations. It is possible for the customer to change some settings with the web tool Senseair Alcohol Screener Configurator, found at: <https://alcohol-screener-configurator.senseair.com/>

Table 2: Key technical specification configurations

Part numbers	540-00016 Workplace E1	540-00017 Workplace J1	540-00013 Workplace S1	540-00014 Workplace S2	540-00015 Workplace S3	SafeStart Flex ¹
Start test ⁴	Input signal, RFID card, button	Input signal, RFID card, button	Input signal, RFID card, button	Input signal	Input signal	Configurable
BrAC Limit ²	0.1 mg/L	0.05 mg/L	0.1 mg/L	0.1 mg/L	0.1 mg/L	0.05 or 0.1 mg/L
BrAC Masking ³	0.05 mg/L	0.05 mg/L	0.03 mg/L	0.03 mg/L	0.03 mg/L	0.02 or 0.05 mg/L

Part numbers	540-00016 Workplace E1	540-00017 Workplace J1	540-00013 Workplace S1	540-00014 Workplace S2	540-00015 Workplace S3	SafeStart Flex ¹
Language ⁴	English	Japanese	Swedish	Swedish	Swedish	English, Japanese or Swedish
Record keeping	No.	No	No	No	No	Yes, results are sent to the web portal
Relay closing time ⁴	1.5 seconds	5 seconds	1.5 seconds	1.5 seconds	8 seconds	Configurable
Relay 1 and 2 closed at	Result below BrAC limit	Result below BrAC limit	Result below BrAC limit	Result below BrAC limit	Result below BrAC limit	Result below BrAC limit
Relay 3 closed at	Result equal to or above BrAC limit	Result equal to or above BrAC limit	Result equal to or above BrAC limit	Result equal to or above BrAC limit	Result equal to or above BrAC limit	Result equal to or above BrAC limit
Input 1 ⁴	Start test	Start test	Start test	Start test	Start test	Configurable
First screen ⁴	"Press button to start"	ボタンを押す もしくは カードをスキャン してください。	"Tryck på knappen för att starta"	"Inväntar signal"	"Inväntar signal"	Configurable
BrAC result on screen ⁴	Yes	Yes	No	No	No	Configurable
Distinct fail ⁴	Same sound for passed and failed results	Different sound for passed and failed results	Same sound for passed and failed results	Same sound for passed and failed results	Same sound for passed and failed results	Configurable
Result presentation time ⁴	4 seconds	5 seconds	4 seconds	4 seconds	4 seconds	Configurable
Fleet control	No	No	No	No	No	Yes

Part numbers	540-00016 Workplace E1	540-00017 Workplace J1	540-00013 Workplace S1	540-00014 Workplace S2	540-00015 Workplace S3	SafeStart Flex ¹
Internet connection and web interface	No	No	No	No	No	Yes
User identification	No	No	No	No	No	RFID card or tag
Alert possibilities	No	No	No	No	No	e-mail, text messages and Live View
Green and block time settings	No	No	No	No	No	Yes, configurable
Integration to other systems	No	No	No	No	No	Yes

Note 1: With SafeStart the system is set up according to your specific requests. Contact Senseair for configuration.

Note 2: If alcohol is detected less than BrAC Limit, the Passed message will be displayed on the screen. If alcohol is detected above BrAC Limit the Failed message will be displayed on the screen.

Note 3: If no alcohol is detected or less than BrAC Masking BrAC is set to 0.00.

Note 4: Setting can be changed by the customer with Senseair Alcohol Screener Configurator.

3. Dimensions

3.1. Wall mounted

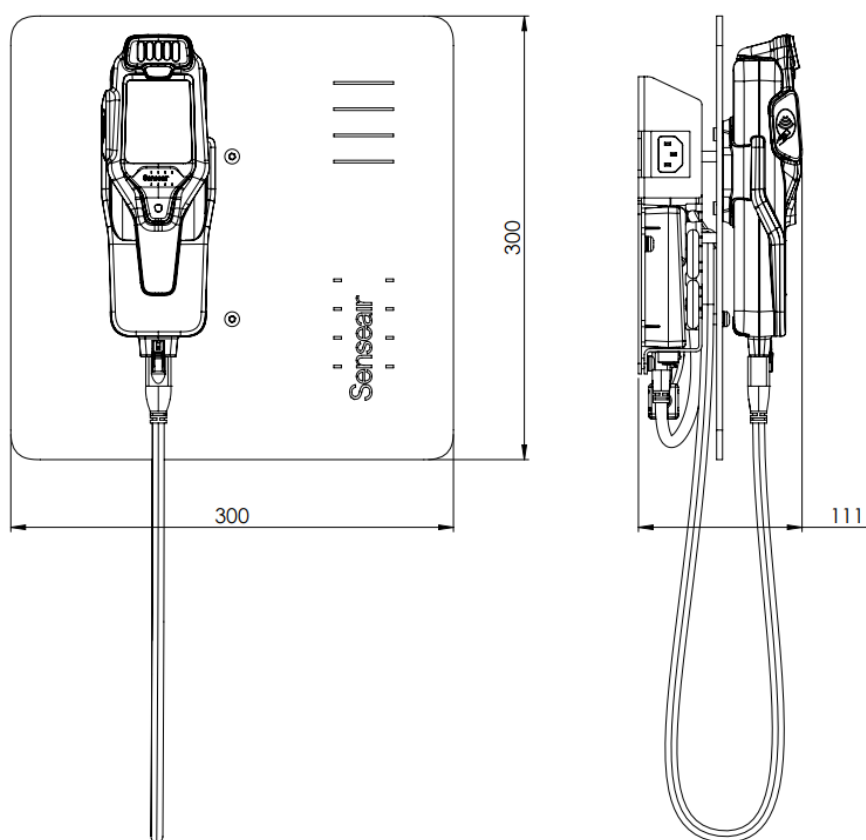


Figure 1: Wall mounted physical dimensions [mm].

3.2. Tabletop mounted

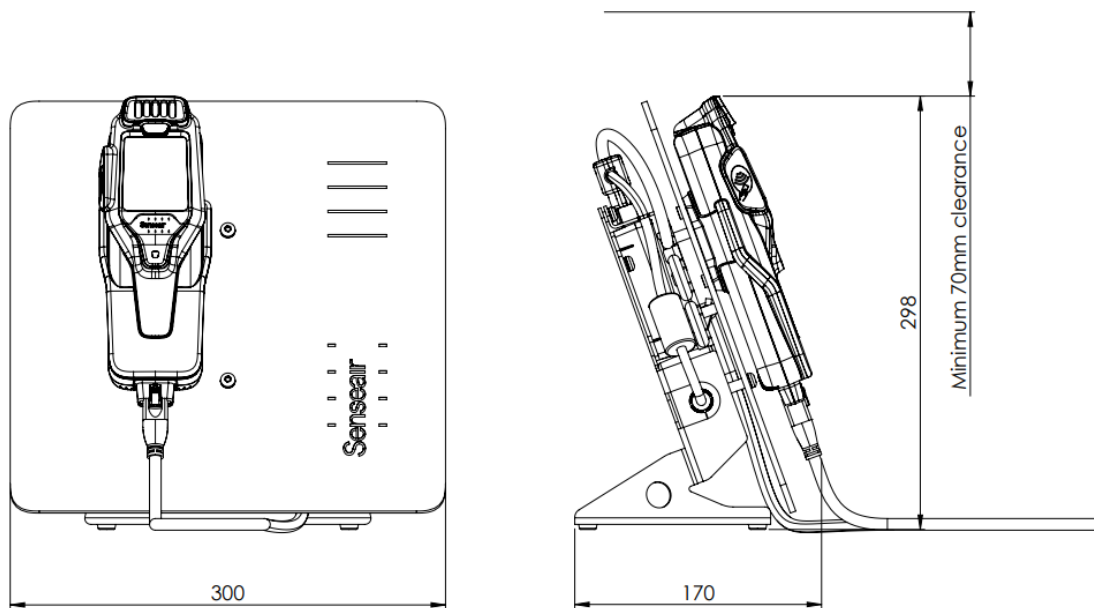


Figure 2: Tabletop mounted physical dimensions [mm].

Note that the table stand is optional and thus not included by default. See Related parts for part number.

4. Connectors

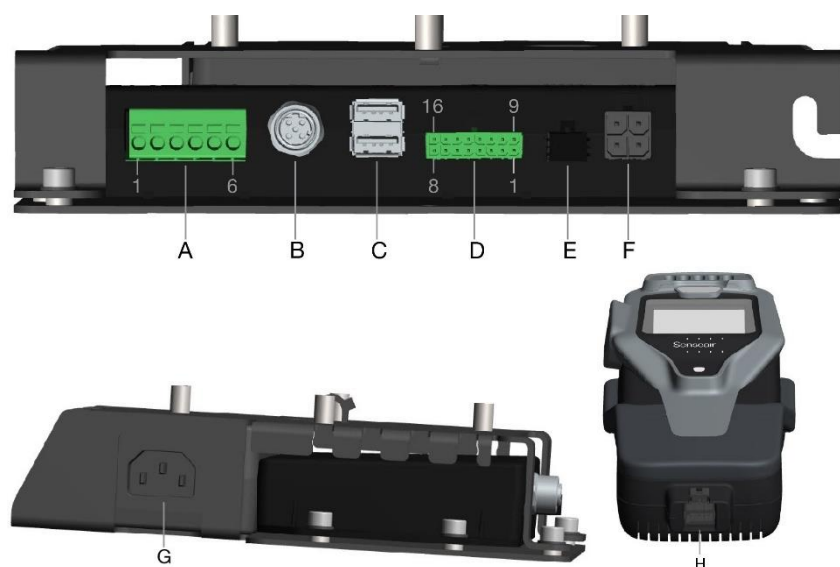


Figure 3: Senseair Workplace connectors

Table 3: Connectors

Connector	Description	Comment															
A	Relay	Peak current: 2 A															
	<table><tr><th>Pin</th><th>Name</th><th>Feature</th></tr><tr><td>1</td><td rowspan="2">Relay 1</td><td rowspan="2">Closed at negative test</td></tr><tr><td>2</td></tr><tr><td>3</td><td rowspan="2">Relay 2</td><td rowspan="2">Closed at negative test</td></tr><tr><td>4</td></tr><tr><td>5</td><td rowspan="2">Relay 3</td><td rowspan="2">Closed at positive test</td></tr><tr><td>6</td></tr></table>	Pin	Name	Feature	1	Relay 1	Closed at negative test	2	3	Relay 2	Closed at negative test	4	5	Relay 3	Closed at positive test	6	Max voltage: 24 V
	Pin	Name	Feature														
	1	Relay 1	Closed at negative test														
	2																
	3	Relay 2	Closed at negative test														
	4																
	5	Relay 3	Closed at positive test														
6																	
		Use cable 840-00028 when connecting to the relays.															
B	Ethernet: M12, 4-pin Ethernet.	Only used for Configuration SafeStart Flex.															
C	USB type A	Only used for Configuration SafeStart Flex with identified usage with external RFID reader.															

Connector	Description			Comment
D	Input			Use cable 840-00028 when connecting to the input. Pin 2-8 and 10-16 not used.
	Pin	Specification	Feature	
	1	5-12 VDC	Start test	
	9	GND, 0 VDC		
E	Sensor connector, box side			
F	Power connector for the built-in power adaptor.			
G	Power connector for the included power cord.			
H	Sensor connector, handset side			

5. Calibration free

Non destructive due to NDIR technique. All Senseair sensors are calibration-free in normal environments thanks to the built-in self-correcting ABC-algorithm. ABC stands for Automatic Baseline Correction, a Senseair self-calibration function for achieving calibration-free gas sensors. That means that the sensor in Senseair workplace do not require any further calibration when used in normal indoor air applications. The theoretical life length of the Senseair Workplace is approximately 7 years.

No limit on number of tests.

6. Related parts

6.1. Signal cable

Maximum current 2 A. Maximum voltage 24 V.

Part number: 840-00028

6.2. Table stand

Part number: 426-00211



Figure 4: Table stand

6.3. Ethernet cable

M12 – RJ45 Ethernet cable, part number: 115-00029

6.4. RFID Reader Workplace

RFID reader, part number: 820-00045

The external RFID reader is an optional ad-on to the Senseair Workplace offer.



Figure 5: Senseair Workplace with external RFID reader as an optional add-on

6.5. Consumables

Particle filter 32x16 mm, part number: 415-00001

7. Related documents

User manual and installation manual are found at www.senseair.com (search: Senseair Workplace). User manual for Senseair Alcohol Screener Configurator is also available there.

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