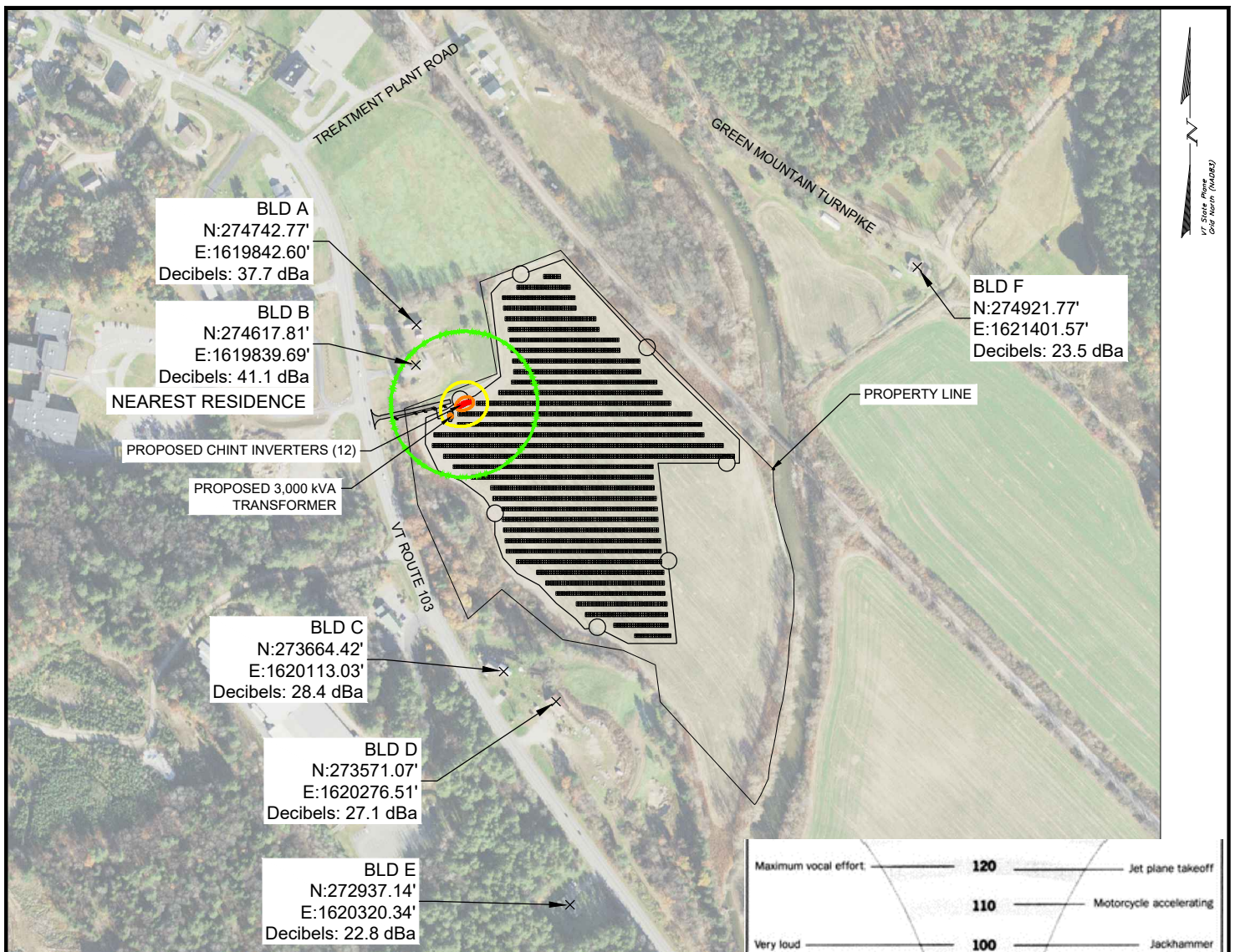
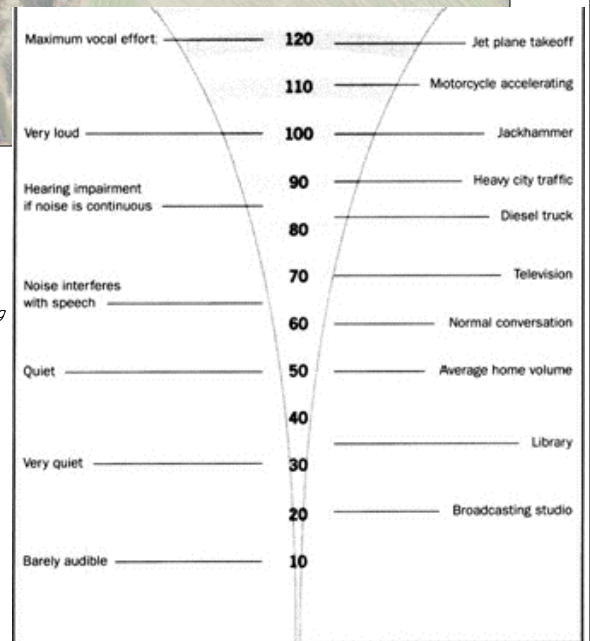
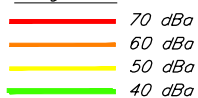




NOTES:

- Sound levels for the Maddox 3,000 kVA pad mounted transformers have sound level of 63 dBA [measured at 0.3 meter, as per NEMA TR1 (ANSI/IEEE Std. C57.12-90-1993, sec. 13.3.4)]. Assuming the measurement was taken at 1 meter to be conservative, the calculated sound level at 3 meters is 53.5 dBA.
- Chint specifies that the Chint 250/275kW string inverters create less than 80 dBA at a distance of 1 meter from the unit. Calculated sound levels for these units at 3 meters is 70.5 dBA. This model shows the inverter rack surrounded by a fence mounted with one layer of a noise damping material which specifies a 29 dBA drop for each noise "blanket". Therefore, we have conservatively modeled the inverters at 56 dBA @ 3m.
- Other decibel ranges were derived using the following distance damping equation [$L2 = L1 - 20 \log(d1/d2)$]. This damping equation was the only factor considered in decibel range attenuation estimates. Elevation, ambient noise, vegetation, angle of solar array and other structures which would further effect the attenuation of sound levels were not considered in this study. Daytime sound levels depicted on this plan are for 3,000 kVA Maddox pad mounted transformer and (12) Chint Inverters with all equipment operating simultaneously at maximum noise level.
- Sound levels reported do not account for any background noise. Local background noise may exceed sound created by project equipment.

Legend:



Decibel Breakdown Compared to Everyday Noises

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CONSULTING ENGINEERS
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**DAYTIME FULL OPERATION
SOUND LEVEL PLAN**

**Basic Sound Level Estimates for
Noise Produced by Transformers &
Inverters**

DRAWN BY:

CPG

CHECKED BY:

SDG

Project: Savage Solar Project

Location: VT Route 103, Chester, VT

Source Data:

Revision Date:

Plan ID:

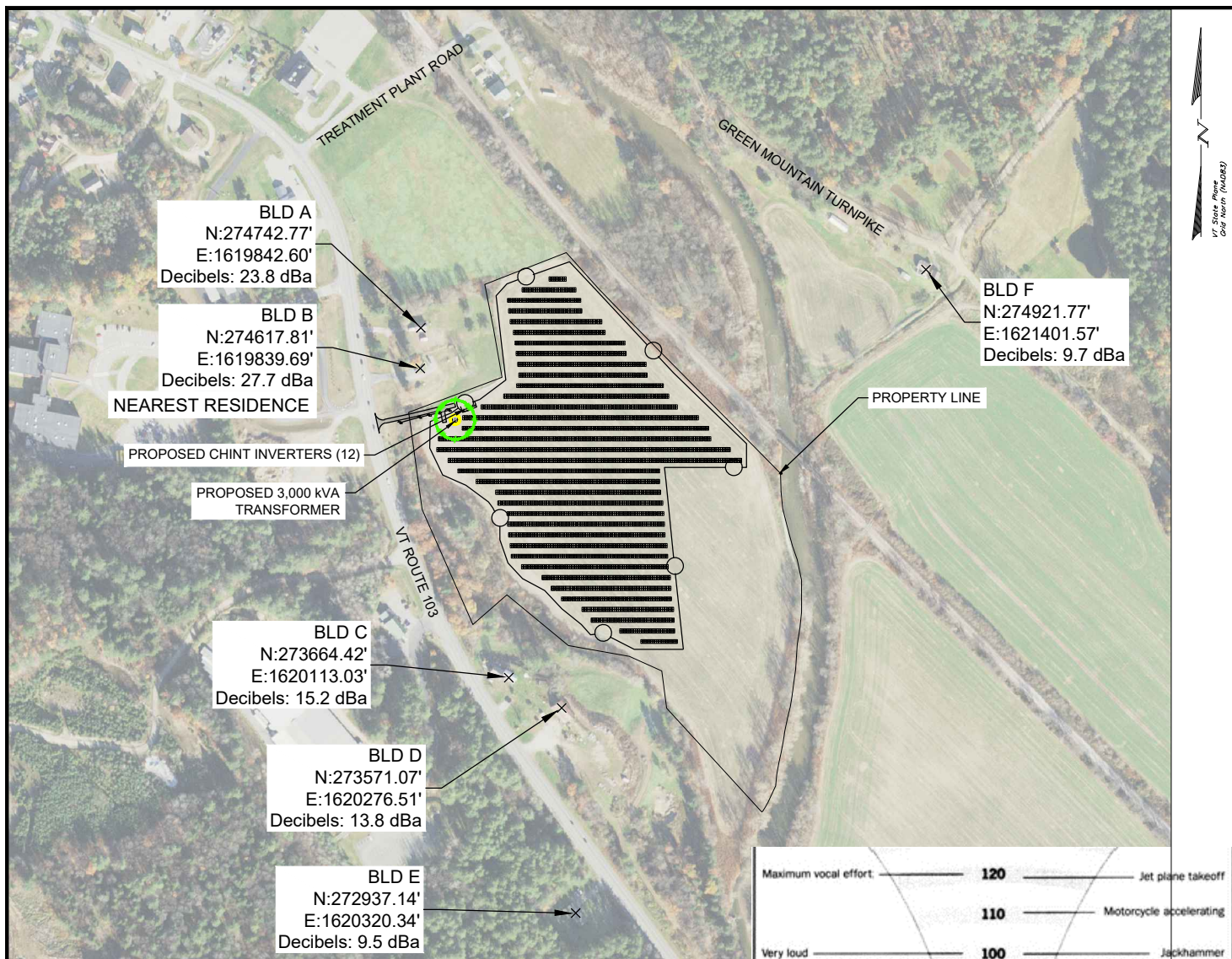
Sound 1

Scale:

1" = 500'

Date:

03/04/26

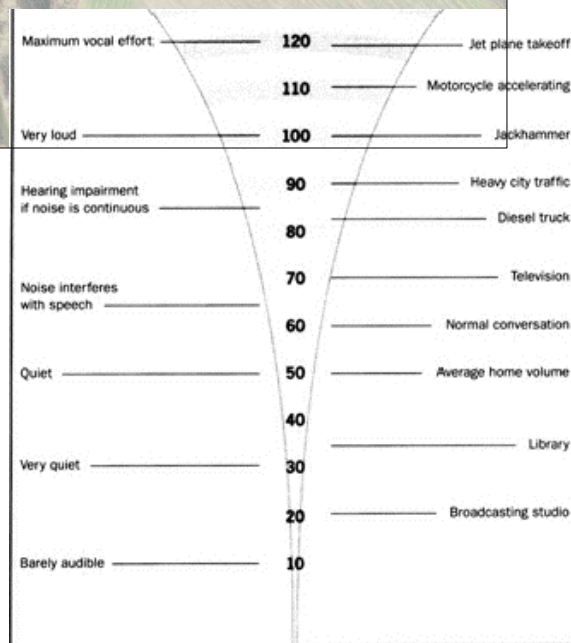


NOTES:

1. Sound levels for the Maddox 3,000 kVA pad mounted transformer have a sound level of 63 dBA [measured at 0.3 meter, as per NEMA TR1 (ANSI/IEEE Std. C57.12-90-1993, sec. 1.3.3.4)]. Assuming the measurement was taken at 1 meter to be conservative, the calculated sound level at 3 meters is 53.5 dBA.
2. Other decibel ranges were derived using the following distance damping equation [$L2 = L1 - 20 \log(d1/d2)$]. This damping equation was the only factor considered in decibel range attenuation estimates. Elevation, ambient noise, vegetation, angle of solar array and other structures which would further effect the attenuation of sound levels were not considered in this study. Nighttime sound levels depicted are for the 3,000 kVA transformer operating at maximum noise level.
3. For nighttime calculations it was assumed that the array inverters and motors make negligible noise when not loaded with power or operating. For the nighttime calculation we assumed they will make no noise and only modeled the 3,000 kVA transformer running at maximum noise.
4. Sound levels reported do not account for any background noise. Local background noise may exceed sound created by project equipment.

Legend:

50 dBa
40 dBa



Decibel Breakdown Compared to Everyday Noises

NIGHTTIME OPERATION SOUND LEVEL PLAN

Basic Sound Level Estimates for Noise Produced by Transformer

DRAWN BY:

CPG

CHECKED BY:

SDG

Project: Savage Solar Project

Location: VT Route 103, Chester, VT

Source Data:

Revision Date:

Plan ID:

Sound 2

Scale:

1" = 500'

Date:

03/04/26

PADMOUNT

**Thousands of transformers.
In stock. Ready to ship.**

Maddox padmount transformers are constructed with the highest quality materials and built in accordance with the highest industry standards including NEMA, ANSI C.57, DOE, and IEEE as applicable. They are ideal for commercial and industrial applications: data centers, solar step-up, utility projects, manufacturing facilities, shopping centers, etc.

Maddox stocks and builds padmount transformers for projects of any size, customized however you need them. With thousands of new and remanufactured units in stock and ready-to-ship, Maddox is ready to power your project on.



Design

HV Bushing Config:

1. Dead front or live front
2. Loop feed or radial feed

Fluid Options:

1. Type II mineral oil
2. Envirotemp™ FR3™

Standard Gauge/

Accessory Package:

1. Pressure relief valve
2. Pressure vacuum gauge
3. Liquid temp & level gauges
4. Drain & sample valve
5. Adjustment taps

Switch Options:

1. 2 position LBOR switch
2. 4 position LBOR switch (V-blade or T-blade)
3. (3) 2 position LBOR switches

Fusing Options:

1. Bayonets w/ isolation links or CLFs

Construction:

1. 5-legged core
2. Rectangular wound copper or aluminum windings
3. Carbon reinforced or stainless steel tank
4. Steel divider between HV & LV cabinets
5. Penta-head captive bolt

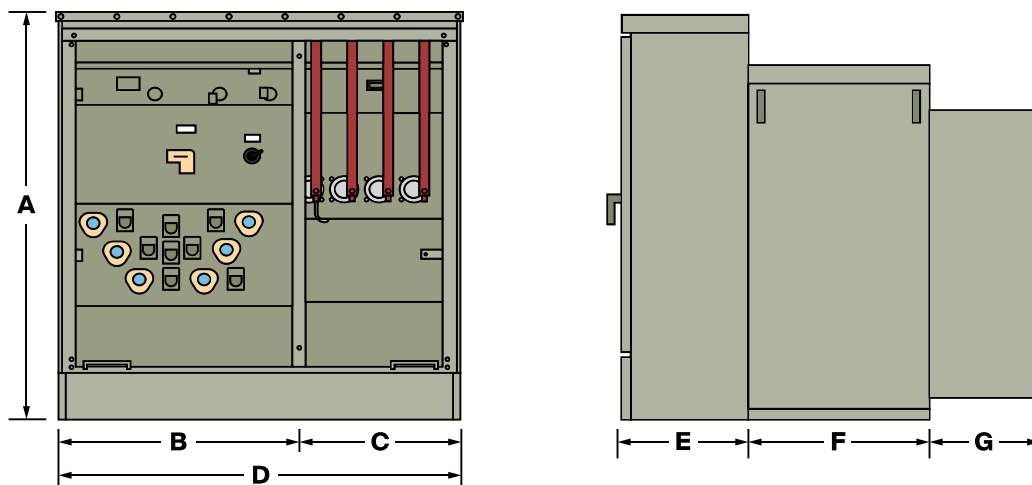
Optional Design Features & Accessories:

1. Gauges w/ contacts
2. External drain and sample valve
3. Electrostatic shielding
4. K-factor design
5. Step-up design
6. Surge-arresters

Available Ratings

Sizes (kVA)	45 75 112.5 150 225 300 500 750 1000 1250 1500 1750 2000 2250 2750 3000 3750 5000
Frequency	60 Hz or 50 Hz
Cooling Class	ONAN or KNAN
Temp Rise	55°C 65°C 55/65°C
Voltages	Available in Δ or Y configuration
600V	208 240 416 480 600
2.5kV – 5kV	2400 4160 4800
15kV	12000 12470 13200 13800 14400
25kV	20780 21600 22900 24940 26400
35kV	33000 34500

Outline & Approximate Dimensions



kVA	A	B	C	D	E	F	G	Gallons	Weight (Lbs)
300	59"	29.5"	22"	51.5"	20.5"	24"	10"	196	4,056
500	59"	33"	26.5"	59.5"	24"	26.5"	10"	210	5,023
750	73"	36"	29"	65"	24"	26.5"	10"	358	7,664
1000	73"	36"	29"	65"	24"	27"	10"	354	8,530
1500	73"	36"	35.5"	71.5"	24"	33.5"	10"	410	10,782
2000	75"	39.5"	28"	67.5"	24"	35"	27"	433	12,490
2500	78"	39.5"	35.5"	75.5"	24"	37.5"	22.5"	545	14,246
3000	84"	30.5"	32"	62.5"	24"	37.5"	38"	550	14,014
3750	75"	50.5"	30"	80.5"	25.5"	42"	38"	730	17,785

Inside & Common Accessories



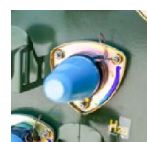
Bayonet
Fuses



Loadbreak
Switch



Tap-changer



Bushings



Drain Sample
Valve



Gauges

NEMA Standards for Liquid-Filled Transformers

These are industry sound levels for liquid filled transformers like padmounts, substations, and polemounts.

Self-Cooled, Two Winding kVA Rating	Average Decibels (dB)
45-500	56
501-700	57
701-1,000	58
1,001-1,500	60
1,501-2,000	61
2,001-2,500	62
2,501-3,000	63
3,001-4,000	64
4,001-5,000	65
5,001-6,000	66
6,001-7,500	67
7,501-10,000	68

275kW/275kVA, 1500Vdc String Inverters for North America



CPS SCH275KTL-DO/US-800

The 275kW high power CPS three phase string inverters are designed for ground mount applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiencies, wide operating voltages, broad temperature ranges and NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The SCH275KTL inverters include 12 MPPTs and are available with either 36 fused PV string inputs or 24 unfused PV string inputs. The CPS FlexOM solution enables communication, controls and remote product upgrades.

Key Features

- NFPA 70, NEC 2017 compliant
- Touch safe DC Fuse holders adds convenience and safety
- CPS FlexOM Gateway enables remote FW upgrades
- Integrated DC disconnect switch
- Protection Functions for enhanced reliability and safety
- Selectable Max AC Active Power of 250kW or 275kW
- 12 MPPTs with 36 fused inputs or 24 unfused inputs
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Full power capacity up to 42°C
- Standard 5 year warranty with extensions to 20 years
- Supported comm protocols (Modbus RTU, TCP/IP, PLC, CAN)

Model Name	CPS SCH275KTL-DO/US-800
DC Input	
Max. DC Input Voltage	1500V
Operating DC Input Voltage Range	500-1500Vdc
Start-up DC Input Voltage / Power	600Vdc / 300W
Number of MPP Trackers	12
MPPT Voltage Range @ PF>0.99 ¹	900-1300Vdc
Max. PV Short-Circuit Current	600A, 50A per MPPT
Number of DC Inputs	36 Fused Inputs, 3 per MPPT or 24 Non-Fused Inputs, 2 per MPPT (determined by SKU)
DC Disconnection Type	Load-rated DC switches
DC Surge Protection	Type II
AC Output	
Max AC Output Power (Selectable) @ PF>0.99	250kW / 275kW
Max. AC Apparent Power	275kVA
Rated Output Voltage	800Vac
Output Voltage Range ²	704-880Vac
Grid Connection Type	3-Phase / PE
Max. AC Output Current @800Vac	198.5A
Rated Output Frequency	60Hz
Output Frequency Range ²	57 - 63Hz
Power Factor	>0.99 (±0.8 adjustable)
Current THD @ Rated Load	<3%
Max. Fault Current Contribution (1 Cycle RMS)	215.2A
Max. OCPD Rating	250A
AC Surge Protection	Type II
System and Performance	
Max. Efficiency	99.0%
CEC Efficiency	98.5%
Stand-by / Night Consumption	5W
Environment	
Enclosure Protection Degree	NEMA Type 4X
Cooling Method	Variable speed cooling fans
Operating Temperature Range ³	-22°F to +140°F / -30°C to +60°C (derating from +107°F / +42°C)
Operating Humidity	0 to 100%
Operating Altitude	8202ft / 2500m (no derating)
Audible Noise	<80dBA @ 1m and 25°C
Display and Communication	
User Interface and Display	LED indicators, WiFi + APP
Inverter Monitoring	Modbus RS485 / Ethernet TCP/IP / PLC / CAN
Site Level Monitoring	CPS FlexOM (1 per 32 inverters)
Modbus Data Mapping	SunSpec / CPS
Remote Diagnostics / FW Upgrade Functions	Standard / (with FlexOM Gateway)
Mechanical	
Dimensions (HxWxD)	26.8 x 41.3 x 15.7in (680 x 1050 x 400mm)
Weight	Approx. 260lbs / 118kg
Mounting / Installation Angle	Vertical installation
AC Termination	Stud Type Terminal (Wire range: 3/0AWG – 600kcmil AL/CU, Lugs not supplied)
DC Termination	36 Fused Input: Screw Clamp Fuse Holder (Wire range: #14 - #6 AWG CU) 24 Non-Fused Input: Screw Clamp Terminal (Wire range: #14 - #8 and #6 - #4 AWG CU)
Fused String Inputs (3 per MPPT) ⁴	20A fuses provided (Fuse values up to 30A acceptable)
Safety	
Certifications and Standards	UL1741SA-2018, CSA-22.2 NO.107.1-01, IEEE1547-2018, FCC PART15
Selectable Grid Standard	IEEE 1547-2018, CA Rule 21, ISO-NE, HECO Rule 14H
Smart-Grid Features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-Var, Freq-Watt, Volt-Watt
Protection Functions	
Reactive Power at Night	Yes
IV Curve Tracing	Yes
Insulation Resistance Monitoring	Yes
Onboard Fault Oscillography	Yes
PV String Current Monitoring	Yes
Residual Current Monitoring	Yes
Input Reverse Polarity Protection	Yes
Output Overcurrent Protection	Yes
Output Short-Circuit Protection	Yes
Output Overvoltage Protection	Yes
Warranty	
Standard	5 Years
Extended Terms	10, 15 and 20 years

1) See user manual for further information regarding MPPT Voltage Range when operating at non-unity PF

2) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.

3) See user manual for further requirements regarding non-operating conditions.

4) Fused string inputs only applicable to the SCH275KTL 36 input model.

PrivacyShield® ABBC-13EXT Exterior Barrier Backed Soundproofing Blanket



Description

The PrivacyShield® ABBC-13EXT Exterior Barrier Backed Soundproofing Blanket is used to block and absorb sound for exterior applications.

The blanket is an exterior grade barrier backed composite (BBC), consisting of UV and tear resistant vinyl coated polyester facing. The facing is quilted on environmentally sustainable 1-2 inch fiberglass batting with Gore® Tenara® thread. It also has a reinforced 1 lb./sq. ft. mass loaded vinyl barrier bonded to one side.

These blankets combine sound blocking and sound absorbing materials. The sound attenuation blankets are constructed with grommets across the top and Velcro® along the vertical edges of the blankets for easy installation and layering. The exterior grade blanket is great for use in outdoor environments where extended lifespan and durability are required.

Technical Characteristics

Size:	54" x 96" Up to 54" x 20'
Thickness:	1" 2" (actual thickness may vary after quilting) 4" (special order)
Construction:	UV resistant heavy-duty vinyl coated polyester faced quilted fiberglass backed with a one pound per square foot reinforced mass loaded vinyl sound barrier
Facing Color:	Grey Tan Black Off-White
Barrier Color:	Grey Tan
Weight:	1.25 lbs / ft² (1") 1.50 lbs. / ft² (2")
Temp Range:	-20° F to 180° F
Fire Rating:	Class 1 or A per ASTM E84 Flame Spread: 23.0 Smoke Density: 30.0



Revised: 2025-04-30

PrivacyShield® ABBC-13EXT Exterior Barrier Backed Soundproofing Blanket

Sound Absorbing Performance

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC
1"	0.18	0.68	0.74	0.72	0.42	0.29	0.65
2"	0.45	0.96	0.87	0.66	0.47	0.28	0.75
4"	0.67	1.05	0.97	0.84	0.86	0.52	0.95

Per ASTM C423

Sound Transmission Loss

Thickness	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	STC
1"	15	17	28	40	45	52	29
2"	14	20	32	41	42	41	33
4"	16	21	30	41	52	56	34

Per ASTM E90 & E413

Revised: 2025-04-30