

# TEMPERATURE MONITORING

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*Safety, Compliance,  
Efficiency & Savings*

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# Cost-effective protection and compliance.

Sonicu's temperature monitoring solution provides safety and protection for all temperature applications from cold storage to cryogenic, **and** automates logging, reporting and regulatory compliance.

Best yet, Sonicu wireless technology and cloud-based platform are cost-effective and easy to implement with no hardwiring back to existing IT or BAS platforms.



# *One Solution; every application.*

Rarely is there a one-size-fits-all solution in the temperature monitoring arena. Healthcare alone presents significant challenges in terms of specialized needs. Operating suites, pharmacy refrigerators and freezers, clean rooms, blanket warmers and dining services are just some of the environments that must be monitored to ensure safety, preserve quality and promote patient experience.

Life science and research depend on strict-tolerance monitoring to preserve and protect years of invaluable research assets.

Cold storage, warehousing, food production and transport also demand a flexible, robust monitoring platform that can scale to expanding needs. The integrity of pharmaceuticals, vaccines and food products has a direct impact on public safety.

In addition to the technical demands of monitoring a broad array of temperature applications, a complex regulatory scheme mandates conforming to a variety of periodic reporting requirements.

Regulatory bodies such as the CDC, VFC, CMS, The Joint Commission, FDA, and USDA all require strict reporting compliance.

Safety, protection and compliance all depend upon a reliable, consistent and proven temperature monitoring system.

Enterprises from healthcare and research to cold-storage warehousing all face similar problems and obstacles: outdated technology, limited time/staff resources and inefficient compliance strategies.

Server-based solutions lack the safety and security of modern cloud-based platforms. Local servers and hardware also require costly maintenance in terms of manpower and dollars. Cloud-based systems are more cost-effective, more reliable and provide instant access to critical data when it is needed most.

Regulatory schemes and reporting requirements prescribe strict monitoring and logging procedures that – without automation - take staff away from core responsibilities, and drain away already tight resources.

Finally, monthly and periodic reporting along with annual probe recalibration become additional burdens on staff resources to compile and format mandatory reports. Sonicu temperature monitoring meets and eliminates all of those problems.

# *When there's no way back.*

## ***The urgent necessity: Failure is not an option***

With irreplaceable asset and public safety protection in play, temperature monitoring failure is not an option.

A 2012 freezer malfunction at Harvard Medical School-affiliated McLean Hospital severely damaged one-third of the world's largest collection of autism brain samples. The Boston Globe reported that the loss set research back by a decade.

More recently, back-to-back failures at two US fertility clinics resulted in the loss of thousands of frozen human embryos. A reproduction technology expert labeled the losses "beyond stunning."

In both cases, the assets stored and monitored were simply irreplaceable. On an arguably less catastrophic but equally important scale, protection of vaccines, pharmaceuticals and other temperature-sensitive assets also depends on a reliable, efficient temperature monitoring system.

Compliance breakdowns, while not as potentially devastating as a disastrous asset or inventory loss, bring their own brand of negative consequences to an enterprise in the form of sanctions, certification loss or income interruption.

Reliable safety, effortless regulatory compliance, improved operational efficiency and effective management are the hallmarks of Sonicu wireless temperature monitoring. Simply put: Our process is the solution to temperature monitoring challenges.

## *Safety*

SMART alarming sets Sonicu apart when it comes to protecting assets and the public. SMART alarm software features include:

- Custom thresholds with user-set high/low buffers to match monitored asset/equipment parameters for the reduction of alarm fatigue.
- Off-line alarm features such as batch alarming notification and auto-clear for improved operational efficiency.
- Alarm reminders to ensure all prior alarms have been addressed and cleared.
- Tiered, escalatable alarming to ensure proper notification goes to the right people at the right time onsite or off.

## *Effortless regulatory compliance*

- Sonicu SNAP Calibration makes annual or recurring probe recalibration plug-and-play, eliminating downtime, expense and administrative worries. New calibrated probes arrive on demand with online certificates and documentation.
- Consistent automated logging and auto-formatted reporting downloads streamline regulatory compliance, ensuring historical accuracy and improving efficiency.
- Intuitive software allows annotation and corrective action history to be included in regulatory reporting.

## *Improved operational efficiency*

- Recover lost hours and labor costs consumed by manual monitoring and hand logging.
- Cloud-based SaaS platform requires no IT resources, network equipment, additional software or maintenance costs.
- Plug-and-play implementation virtually eliminates installation costs.



# *Effective Management Tools.*

Sonicu's entire suite of monitoring solutions is complemented by a comprehensive array of management reporting tools to facilitate total system usability, reliability and confidence.

- Live, user-customized dashboards aggregate system-wide monitored data and provide superior operational visibility with real-time views across all departments and locations.
- Calibration reports contain all probe certification information at a glance to keep you compliant, including serial number, calibration date and a downloadable calibration certificate.
- Fully automated Temperature reports eliminate manual monitoring, logging and reporting, are regulatory compliant and provide daily minimum and maximum temperatures with real-time temperature data.
- Weekly Device Summary reports provide high-level weekly summaries for every deployed device, including number of alarm events, minimum, maximum and average readings.

- Alarm History reports give detailed descriptions of alarm events for regulatory compliance showing alarm time, location and device; resolution time; acknowledgement and resolution commentary.
- Device Connectivity reports provide real-time connectivity and data transmission statistics for every Sonicu monitoring point to document successful deployment, determine optimal device placement and aid in debugging offline issues that might arise.

Serial	Probe Serial	SNAP Enrollment	Address	Probe Type	Calibration Date	Certificate
6100409D9081D9	48011610D7F4EE28	Not Enrolled	None	Digital Glycol	10/04/2017	<a href="#">View</a>
6000409D9081D9	84011610D46DEE28	Not Enrolled	None	Digital Glycol	10/04/2017	<a href="#">View</a>
6000409D908183	FCEA97DE15FFFFFF	Not Enrolled	None	External HT(Temp),External HT(Humidity)	09/06/2017	<a href="#">View</a>
6000409D8EE0B5	F7021502E604FF28	Not Enrolled	None	Digital Air	09/19/2017	<a href="#">View</a>
6000409D908207	7B021564D1E9FF28	Not Enrolled	None	Digital Air	09/14/2017	<a href="#">View</a>
6000409D908198	C6011610D475EE28	Not Enrolled	None	Digital Glycol	10/04/2017	<a href="#">View</a>
602C3AE81DDDE7	77011610E953EE28	Not Enrolled	None	Digital Glycol	10/04/2017	<a href="#">View</a>
6100409D908207	8D0216081003EE28	Not Enrolled	None	Digital Glycol	10/04/2017	<a href="#">View</a>
6000409D908254	3B0216082290EE28	Not Enrolled	None	Digital Glycol	10/04/2017	<a href="#">View</a>
6100409D908197	6E0216082142EE28	Not Enrolled	None	Digital Glycol	10/09/2017	<a href="#">View</a>

Zone Name	Device Name	Serial	Alarm Time	Resolved By	Resolved Time	Alarm Reading	Acknowledge comment	Resolved comment
Temperatures	Freezer	6300409D85CEEF	06/02/2018 09:00:24	Server	06/02/2018 10:42:15	44.38°F	This device was out...	Alarm was automatic...
Temperatures	Freezer	6300409D85CEEF	05/05/2018 09:15:17	Server	05/05/2018 10:42:32	48.78°F	This device was out...	Alarm was automatic...
Temperatures	Regular	6200409D85CEEF	05/02/2018 15:45:18	Server	05/02/2018 16:12:14	47.19°F	This device was out...	Alarm was automatic...
Temperatures	Freezer	6300409D85CEEF	04/07/2018 09:10:22		04/07/2018 21:04:42	40.78°F	This device was out...	Defrost
Temperatures	VFC Fridge	6000409D85CEEF	02/06/2018 12:10:19	Server	02/06/2018 12:23:40	48.31°F	This device was out...	Alarm was automatic...
Temperatures	Freezer	6300409D85CEEF	01/27/2018 09:25:14		01/27/2018 19:01:34	37.06°F	This device was out...	Defrost
Temperatures	VFC Fridge	6000409D85CEEF	01/25/2018 14:25:20	Server	01/25/2018 14:58:03	Offline	This device was off...	Alarm wa automatic
Temperatures	Freezer	6300409D85CEEF	01/25/2018 14:25:20	Server	01/25/2018 14:58:03	Offline	This device was off...	Alarm wa automatic
Temperatures	Regular	6200409D85CEEF	01/25/2018 14:25:20	Server	01/25/2018 14:58:03	Offline	This device was off...	Alarm wa automatic
Temperatures	Freezer	6300409D85CEEF	12/30/2017 21:20:13	Server	01/05/2018 15:38:16	Offline	This device was off...	Alarm wa automatic

**Weekly Device Summary**  
 Powered by **SONICU.COM**  
 (06/06/2018 - 06/12/2018)

Device Name	Minimum	Average	Maximum	# Alarms
<b>1st Floor - Cardiology and Imaging</b>				
1.Imaging.Blk Wrm MRI	105°F	116°F	125°F	0
1.Imaging.Mam Blk Wrmr	87°F	91°F	107°F	0
1.Imaging.CT Small Mini Fridge	34°F	36°F	42°F	0
1.Imaging.QC Mini Fridge	35°F	38°F	43°F	1
1.Imaging.CT Large Mini Fridge	34°F	35°F	39°F	0
1.Imaging.Mam.Fridge	36°F	38°F	43°F	1
1.Imaging. CT Ambient Temp	65°F	69°F	74°F	0
1.Imaging.Staff Refrigerator	31°F	35°F	41°F	0
1.Imaging.Staff Freezer	-14°F	-8°F	4°F	0

- Alarm Resolution reports are essential reporting tools for Sonicu Enterprise users. Organizes systems by group, department or area and shows alarm totals, active or resolved status, and average time to acknowledge alarms.
- Login reports provide successful login data by name, date and time for administrators to identify problems and ensure all users are utilizing Sonicu to its fullest potential.

User Name	Login Time	Success
Clay Hopf	06/13/2018 09:16:23	Successful
Clay Hopf	06/13/2018 08:49:47	Successful
Nathan Capen	06/13/2018 08:33:35	Successful
Nathan Capen	06/13/2018 08:33:27	Failed
Richard Wayne	06/13/2018 08:04:43	Successful
Chris Cooper	06/13/2018 06:50:46	Successful

Name	System Number	# Res	# Ack'd	Resolved (%)	Last Resp	Last Checks
SP Omb-Proces	862288411276	118	100	85.1%	06/13/2018 22:02:12	06/13/2018 20:02:18
SP Omb-Proces	862288411276	118	100	85.1%	06/13/2018 22:02:12	06/13/2018 20:02:18
SP Lab-Proces	862288411276	118	100	85.1%	06/13/2018 20:02:18	06/13/2018 20:02:18
SP Lab-Proces	862288411276	118	100	85.1%	06/13/2018 20:02:18	06/13/2018 20:02:18
SC Omb-Proces	862288411276	112	112	100%	-	06/13/2018 20:14:07
SC Omb-Proces	862288411276	111	100	90.1%	06/13/2018 13:05:47	06/13/2018 20:14:07
SC Lab-Proces	862288411276	106	100	91.5%	06/13/2018 18:13:30	06/13/2018 20:08:18
SC Lab-Proces	862288411276	102	100	84.3%	06/13/2018 20:11:31	06/13/2018 20:08:18
SO Lab-Proces	862288411276	118	100	90.7%	06/13/2018 11:48:18	06/13/2018 20:02:18
SC Lab-Proces	862288411276	118	100	85.1%	06/13/2018 11:28:18	06/13/2018 20:02:18
SC Procs-Proces	862288411276	118	100	86.0%	06/13/2018 15:48:18	06/13/2018 20:02:18
SO Procs-Proces	862288411276	118	100	85.1%	06/13/2018 15:48:18	06/13/2018 20:02:18

**Alarm Resolution Report**  
(06/01/2018 - 06/13/2018)  
Powered by  
**SONICU.COM**

Generated 06/13/2018 09:40:53

Group	Resolved				Acknowledged				Active			
	Total	#	%	Avg Time	#	%	Avg Age	#	%	Avg Age		
default	49	47	96%	1.1 Hrs	2	4%	3 Day, 5 Hrs	0	-	-		
UH Critical	34	33	97%	1.0 Hrs	1	3%	1 Day, 1 Hrs	0	-	-		
UH Tissue Critical	0	0	-	-	0	-	-	0	-	-		
Under Construction	11	10	91%	0.8 Hrs	1	9%	1 Day, 1 Hrs	0	-	-		
IDS	7	7	100%	0.7 Hrs	0	-	-	0	-	-		
Pharmacy Infusion	0	0	-	-	0	-	-	0	-	-		
LAB	5	5	100%	1.5 Hrs	0	-	-	0	-	-		
Retail Pharmacy	4	3	75%	0.7 Hrs	1	25%	5 Day, 8 Hrs	0	-	-		

# *Flexible transmission options mean easy installation.*

## *Getting Started*

Bringing Sonicu temperature monitoring online is as simple as mounting a meter, plugging in a probe and logging on to the SoniCloud platform for instant access to temperature data and reports.

Many monitoring systems have limited means of transmitting data. However, Sonicu's topography options are the most flexible in the industry and include 900 MHz, 4G cellular, Ethernet and WiFi for sensor-to-cloud data transmission. That means Sonicu adapts to your unique conditions, meets your specific data transmission needs and conforms to your data delivery criteria.

Sonicu's wireless data transmission capabilities also mean no hardwired retrofits to existing IT platforms or disruptive and expensive construction projects. Sonicu temperature monitoring is completely scalable. Cloud-based software allows you to start with one monitoring point and expand seamlessly as needs and applications dictate.

## *Start today*

Given the enhanced public and asset safety /protection, streamlined compliance capability and improved operational efficiencies that Sonicu temperature monitoring instantly brings to the table, there's more to lose by not calling today.

*Learn more at [www.sonicu.com](http://www.sonicu.com)  
Contact us at (317) 468-2345  
or email [info@sonicu.com](mailto:info@sonicu.com)*

## ***About Sonicu***

Sonicu was founded in 2008 with a wireless sensor application for sound management in neonatal intensive care units. Since that time, we have expanded to become a leader in wireless automated temperature monitoring with a suite of complementary monitoring solutions that includes temperature, humidity, differential air pressure, and machine-to-machine smart sensors.

Today, Sonicu can be found in virtually every business sector from healthcare and life science to warehousing and manufacturing.

Based in Central Indiana, Sonicu continues its quest for innovation and service, providing effective solutions to challenging problems, monitoring and measuring everything that's important.

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