

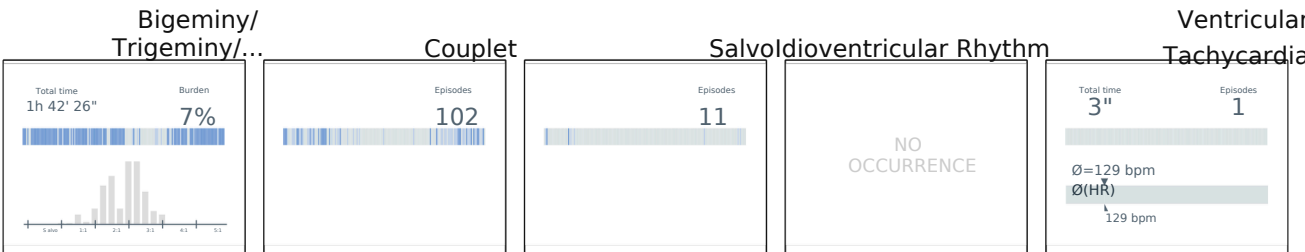
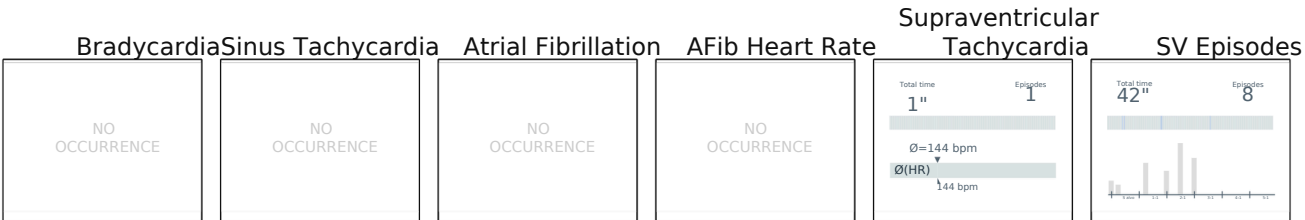
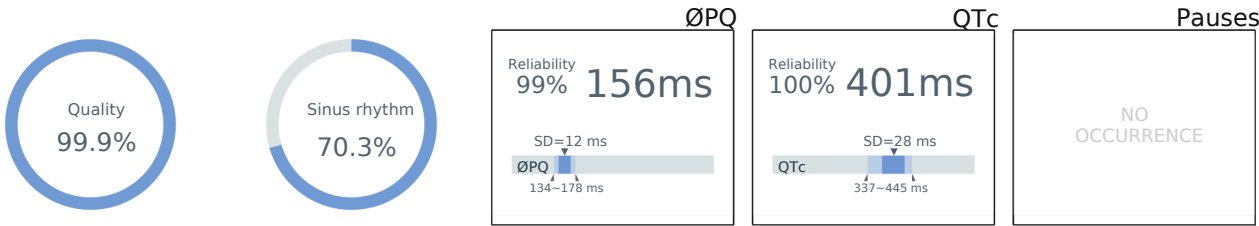
DEMO REPORT



Long-term ECG Report

ID
 Name Test Data, Bittium
 Date of birth 06/12/1972 (46)
 Gender male

Recorded on 11/24/2018 10:47 AM
 End of recording 11/25/2018 12:22 PM
 Recording time 1d 1h 35'
 Analyzed time 1d 1h 34' (100.0%)
 Recorder Bittium Faros 180
 S/N 1621118

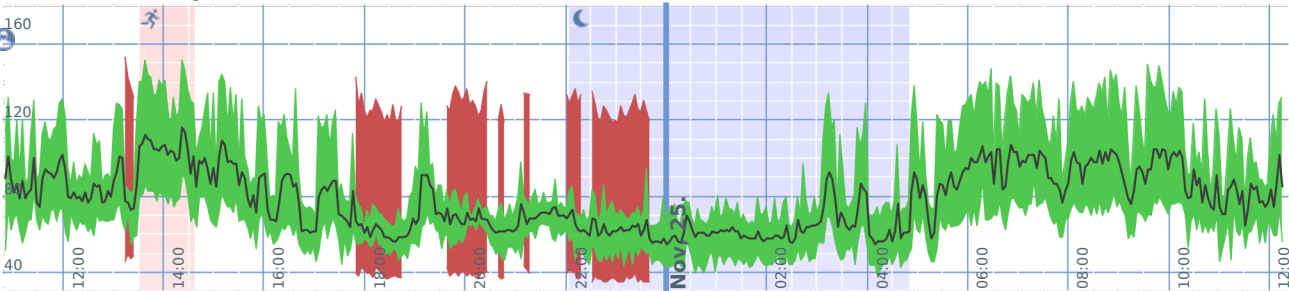


AV Block	#Block 1°	Time in Block 1°	#Block 2a°	Time in Block 2a°	#Block 2b°	Time in Block 2b°	#Block 3°	Time in Block 3°
	0	0"	0	0"	0	0"	0	0"

min(HR)!	Ø(HR)-i	max(HR)!	#R	#N	#PAC/SVE	#Aberr	#PVC
54bpm	69bpm	115bpm	122212	113587	1046	0	7579
min(RR)	max(RR)		%N	%N	%PAC/SVE	%Aberr	%PVC
256ms	1664ms		92.9%	92.9%	0.9%	0.0%	6.2%

Low Classification
 4b - salvos

Heartrate [BPM]



Long-term ECG Report

Name Test Data, Bittium
Date of birth 06/12/1972 (46)

Recorded on 11/24/2018
Recording time 1d 1h 35'

General

An ambulatory Holter recording has been carried out, started on Saturday, 24. November 2018 at 10:47 with an overall duration of 1d 1h 35'. The analyzed time (after noise removed) was 1d 1h 34' (100.0%). The overall quality of the recording was very good.

Basic Rhythm

The predominant rhythm of the recording is sinus rhythm. The minimum heart rate was 54 bpm (Sunday, 25. November 2018 at 04:17), the maximum heart rate was 115 bpm (Saturday, 24. November 2018 at 14:23). The correspondence between the heart rate profile and the activities is undefined. The average heart rate was 86 bpm during the day, 64 bpm at night and 69 bpm over the whole recording. The average heart rate over the whole recording was 69 bpm. The heart rate drops more than 15% during the night, the functionality of the day/night regulation is undefined.

Supraventricular Extrasystoles

There were numerous (40–400 SVE/hr) supraventricular extrasystoles found. There were 1046 supraventricular extrasystoles, corresponding to burden of 0.9%, found.

Supraventricular Tachycardia

There was one episode of supraventricular tachycardia found. In total 1" or 0.0% of the recording shows supraventricular tachycardia. The episode had a duration of 1", and an average heart rate of 144 bpm.

Ventricular Extrasystoles

There were numerous (40–400 PVC/hr) ventricular extrasystoles found. There were 7579 ventricular extrasystoles, corresponding to burden of 6.2%, found.

Ventricular Tachycardia

There was one episode of ventricular tachycardia found. In total 3" or 0.0% of the recording shows ventricular tachycardia. The episode had a duration of 3", and an average heart rate of 129 bpm. The ventricular tachycardia is sustained. The ventricular tachycardia is preceded by sinus rhythm (sudden onset). The morphology of the ventricular tachycardia is monomorphic.

Pauses

There were no pauses observed.

Patient events

Time of event	Reported	Evaluation	Findings
24. Nov 10:47:53	patient marker	without finding	Accidental push

Long-term ECG Report

Name | Test Data, Bittium
Date of birth | 06/12/1972 (46)

Recorded on | 11/24/2018
Recording time | 1d 1h 35'

Minimum heart rate

11/25/2018 04:17 AM

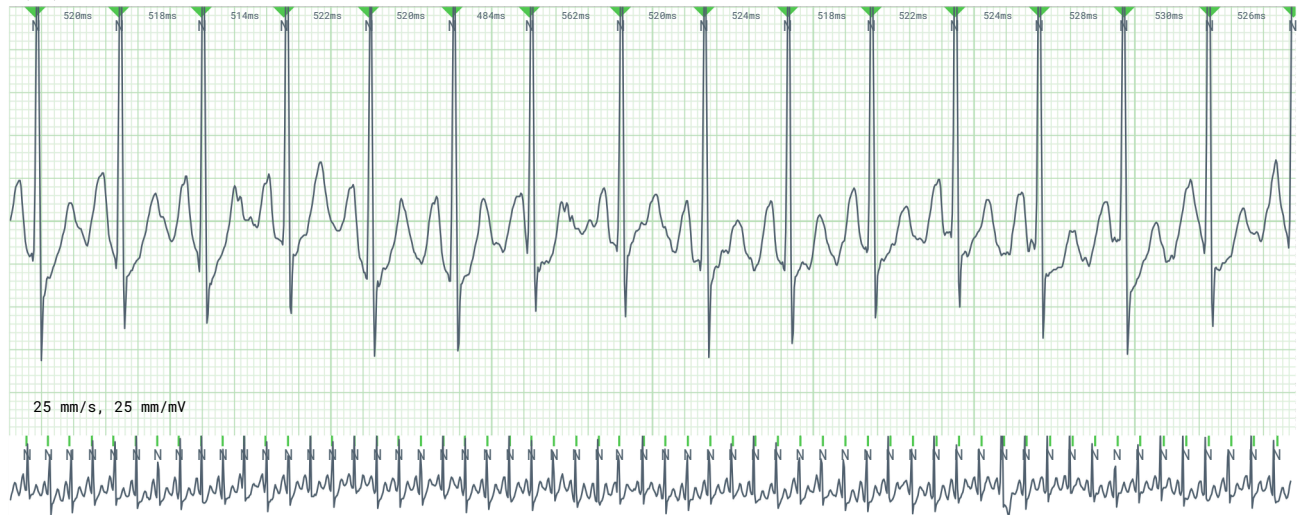
Ø(HR): 54bpm



Maximum heart rate

11/24/2018 02:23 PM

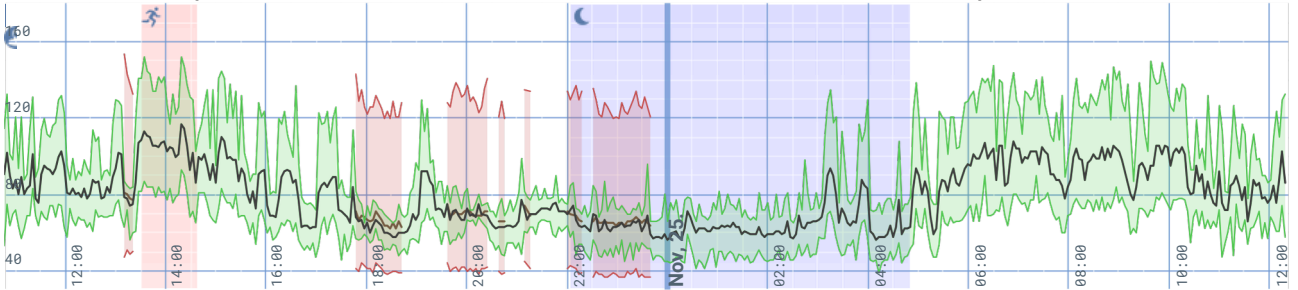
Ø(HR): 115bpm



Long-term ECG Report

Name | Test Data, Bittium
 Date of birth | 06/12/1972 (46)

Recorded on | 11/24/2018
 Recording time | 1d 1h 35'



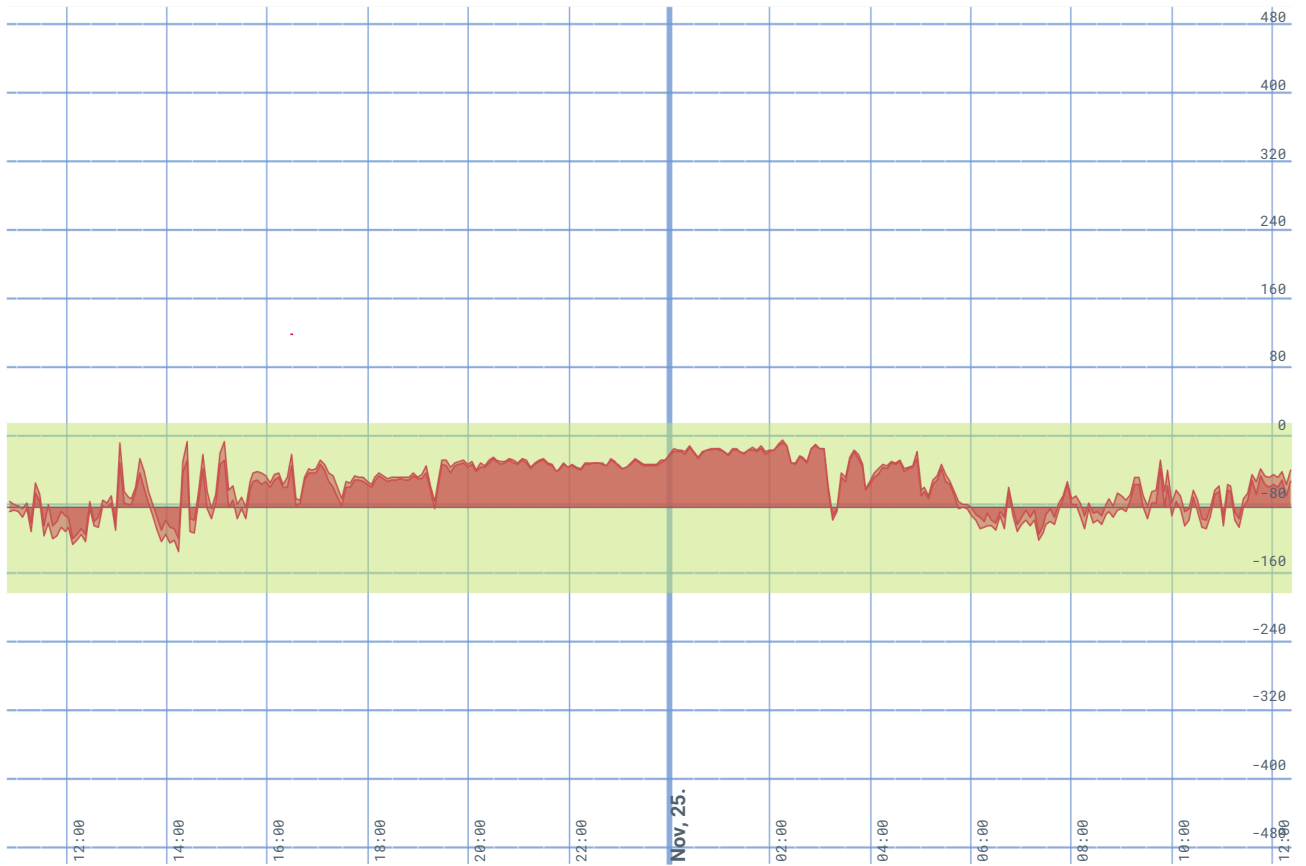
	Heart Rate						Ventricular Rhythm					Atrial Rhythm				Atrioventricular Rhythm					
	#N	min(HR)	Ø(HR)	max(HR)	#Brady	#STachy	#Pauses	#PVC	#VT	#SALVOS	#Couplets	#Triplets	#PAC/SVE	#SVT	#AF	#AFL	#SV-Runs	#Block 1°	#Block 2a°	#Block 2b°	#Block 3°
Totals	113587	46	80	129	0	0	0	7579	1	11	102	586	1046	1	0	0	8	0	0	0	0
11/24/2018 10:47 AM	4993	68	88	110				240		3	7	10	33								
11/24/2018 11:47 AM	4791	69	85	129				314			9	22	30	1			1				
11/24/2018 12:47 PM	5065	66	97	123				430			5	44	101				2				
11/24/2018 01:47 PM	5663	76	103	124				426	5		10	45	79								
11/24/2018 02:47 PM	5262	63	94	118				289				7	19	50							
11/24/2018 03:47 PM	4550	52	80	110				290				8	21	26							
11/24/2018 04:47 PM	4205	51	75	106				269				3	18	25							
11/24/2018 05:47 PM	3370	53	62	77				488				3	58	12							
11/24/2018 06:47 PM	4184	56	76	109				269	1			2	19	20			2				
11/24/2018 07:47 PM	3523	55	66	84				534			2	60									
11/24/2018 08:47 PM	3925	54	69	90				243			4	13									
11/24/2018 09:47 PM	3628	55	67	87				412			3	42									
11/24/2018 10:47 PM	3413	52	62	88				408			5	37									
11/24/2018 11:47 PM	3495	49	60	79				141			6	1									
11/25/2018 12:47 AM	3550	51	61	78				144			2	5									
11/25/2018 01:47 AM	3537	50	60	79				67			18						1				
11/25/2018 02:47 AM	4187	51	72	110				81			35	3									
11/25/2018 03:47 AM	3831	46	66	105				91			16	2									
11/25/2018 04:47 AM	4613	50	80	108				127			57	5									
11/25/2018 05:47 AM	5396	75	96	123				276			42	16	98								
11/25/2018 06:47 AM	5446	76	99	121				450		1	4	38	92								
11/25/2018 07:47 AM	5306	69	94	127				340			5	19	76								
11/25/2018 08:47 AM	5238	67	93	124				375			9	22	77								
11/25/2018 09:47 AM	5199	66	93	122				385			8	35	93								
11/25/2018 10:47 AM	4493	56	80	107				292		2	9	21	37				2				

	Heart Rate						Ventricular Rhythm					Atrial Rhythm				Atrioventricular Rhythm						
	#N	min(HR)	Ø(HR)	max(HR)	#Brady	#STachy	#Pauses	#PVC	#VT	#SALVOS	#Couplets	#Triplets	#PAC/SVE	#SVT	#AF	#AFL	#SV-Runs	#Block 1°	#Block 2a°	#Block 2b°	#Block 3°	
11/25/2018 11:47 AM	2724	64	83	116				198			3	13	46									

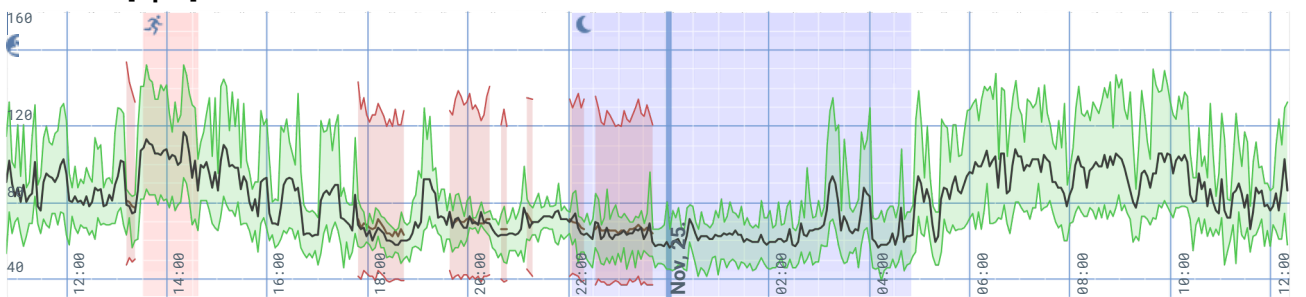
ST-Analysis Report

Name | Test Data, Bittium
 Date of birth | 06/12/1972 (46)

Recorded on | 11/24/2018
 Recording time | 1d 1h 35'



Heartrate [BPM]



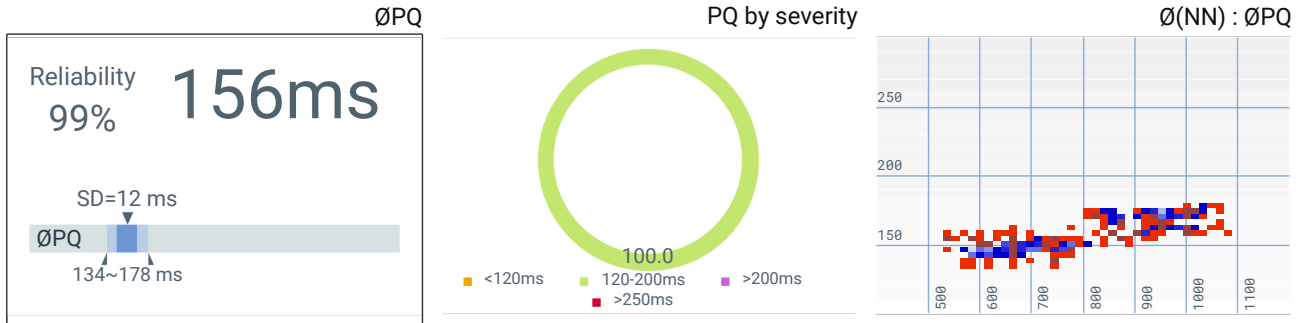
ST elevation

11/24/2018 1' 53"#: 1 Duration: 1' 53" ΔST: 118 Ø(ST@60): 17 Ø(ST@80): 25 max(ST@60): 55 max(ST@80): 73
 04:28 PM

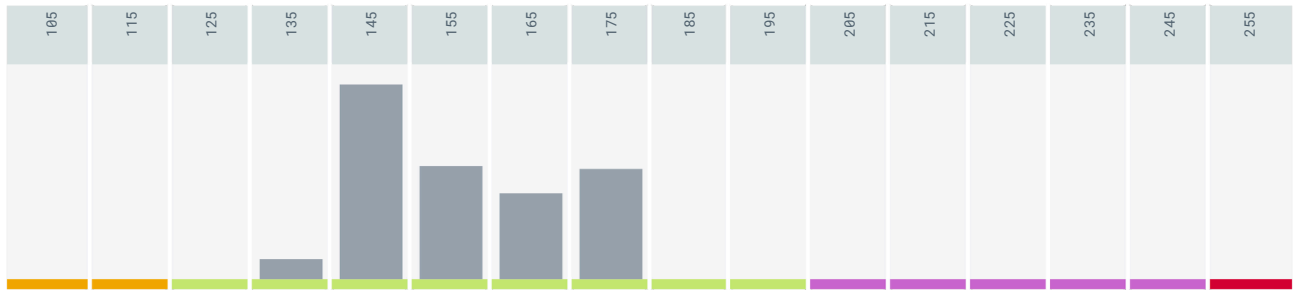
Atrial Analysis Report

Name | Test Data, Bittium
 Date of birth | 06/12/1972 (46)

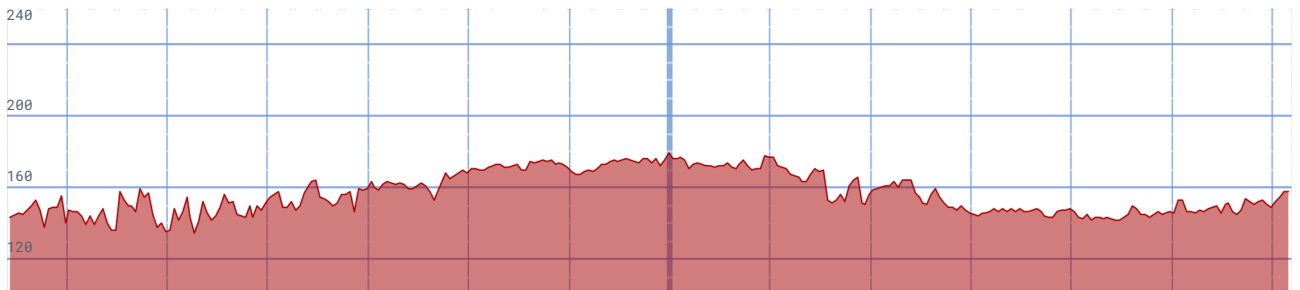
Recorded on | 11/24/2018
 Recording time | 1d 1h 35'



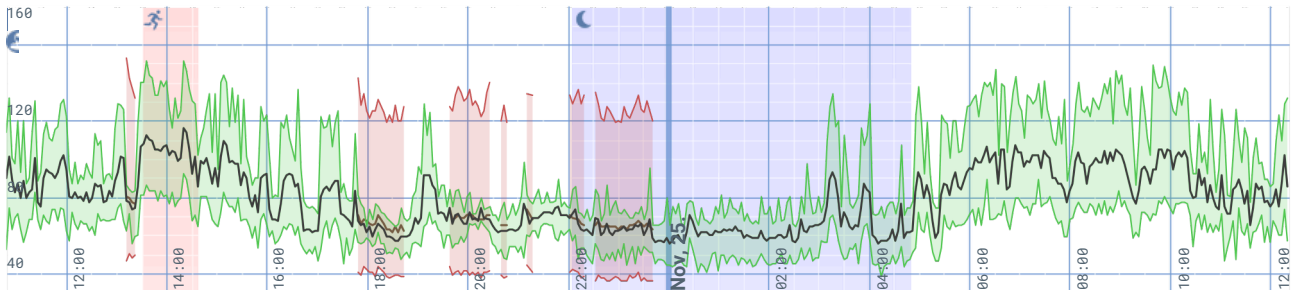
PQ distribution



ØPQ



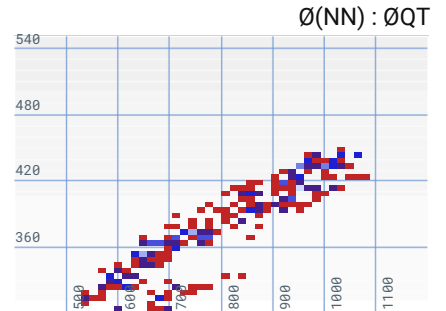
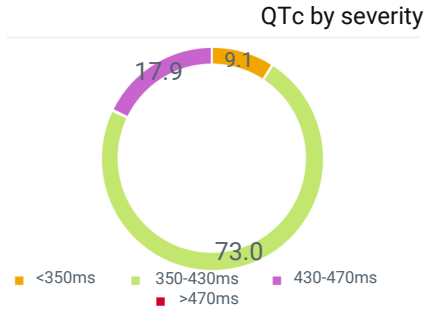
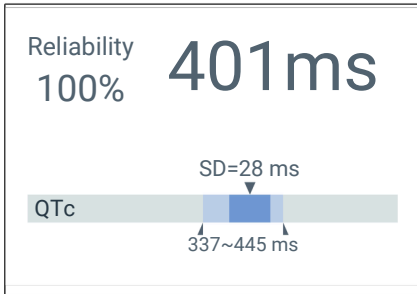
Heartrate [BpM]



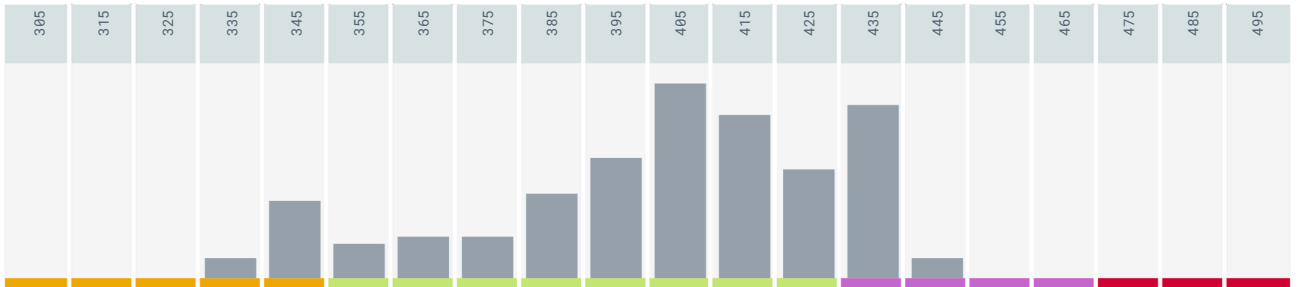
QT-Analysis Report

Name | Test Data, Bittium
 Date of birth | 06/12/1972 (46)

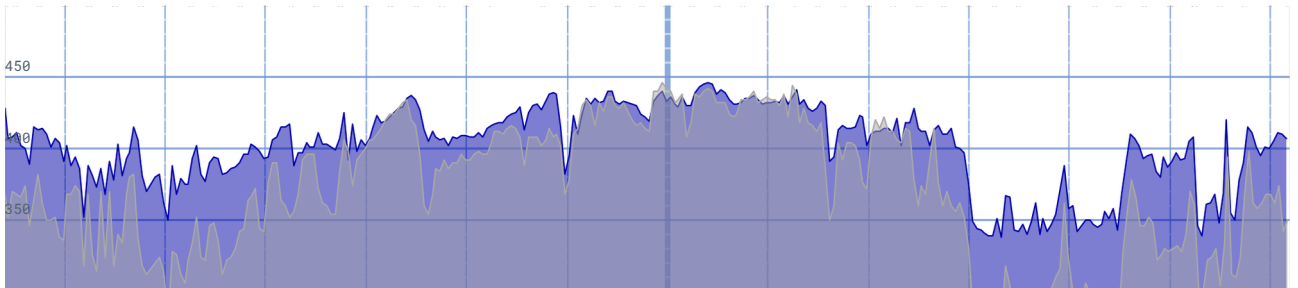
Recorded on | 11/24/2018
 Recording time | 1d 1h 35'



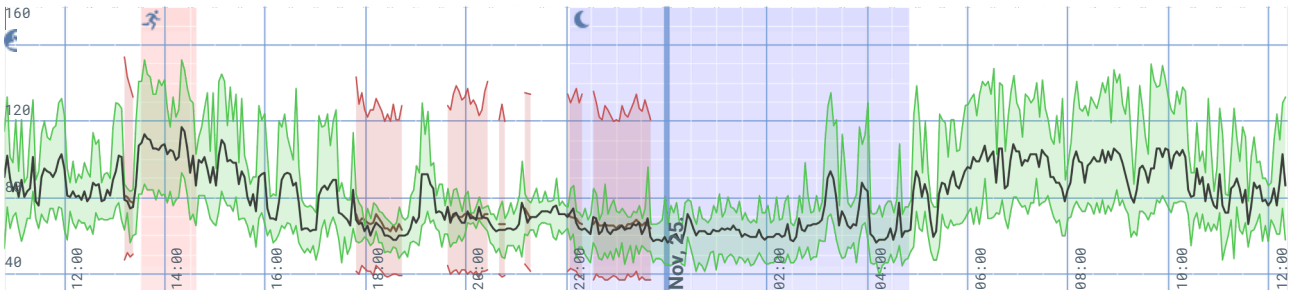
QTc distribution



ØQT QTc



Heartrate [BpM]



Long-term ECG Report

Name | Test Data, Bittium
 Date of birth | 06/12/1972 (46)

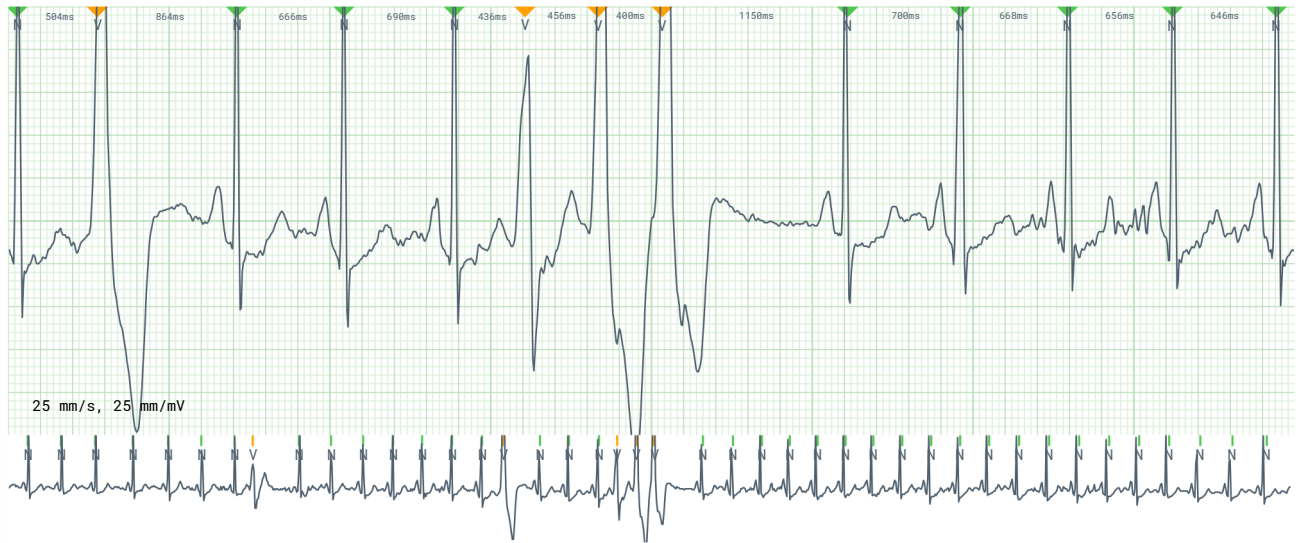
Recorded on | 11/24/2018
 Recording time | 1d 1h 35'

List of selected ECG strips

- 11/24/2018 10:54 AM 1" Couplet (multifocal)
- 11/24/2018 11:05 AM 2" Salvo (multifocal)
- 11/24/2018 11:52 AM 1" Atrial Bigeminy/Trigeminy/... #PAC/SVE: 4 #N: 0 Ø(HR): 144bpm
- 11/24/2018 11:52 AM 1" Supraventricular Tachycardia max(HR): 144bpm Duration: 1" #PAC/SVE: 4 Ø(HR): 144bpm
- 11/24/2018 01:16 PM 40" Bigeminy/Trigeminy/... (multifocal) #PVC: 16 #N: 39 Ø(HR): 81bpm
- 11/24/2018 07:01 PM 3" Ventricular Tachycardia #PVC: 5 Ø(HR): 129bpm max(HR): 141bpm Duration: 3" Trigger: Sinus
- 11/24/2018 07:58 PM 56" Bigeminy/Trigeminy/... #PVC: 16 #N: 52 Ø(HR): 72bpm
- 11/25/2018 11:25 AM 1" Salvo
- 11/24/2018 10:54 AM (1") Couplet (multifocal)

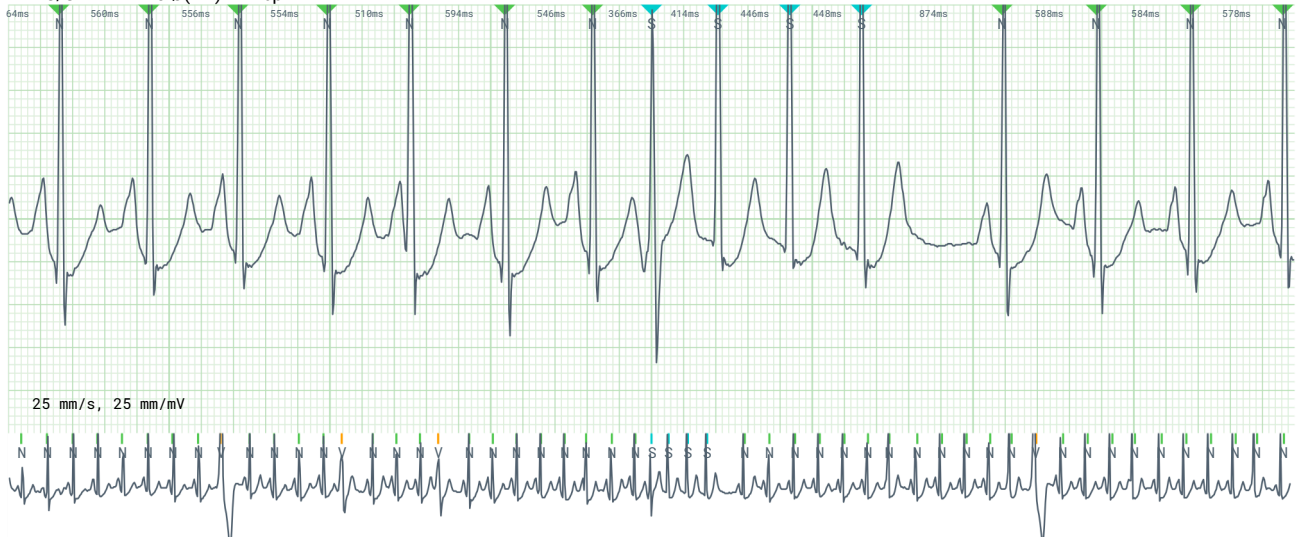


11/24/2018 11:05 AM (2") Salvo (multifocal)



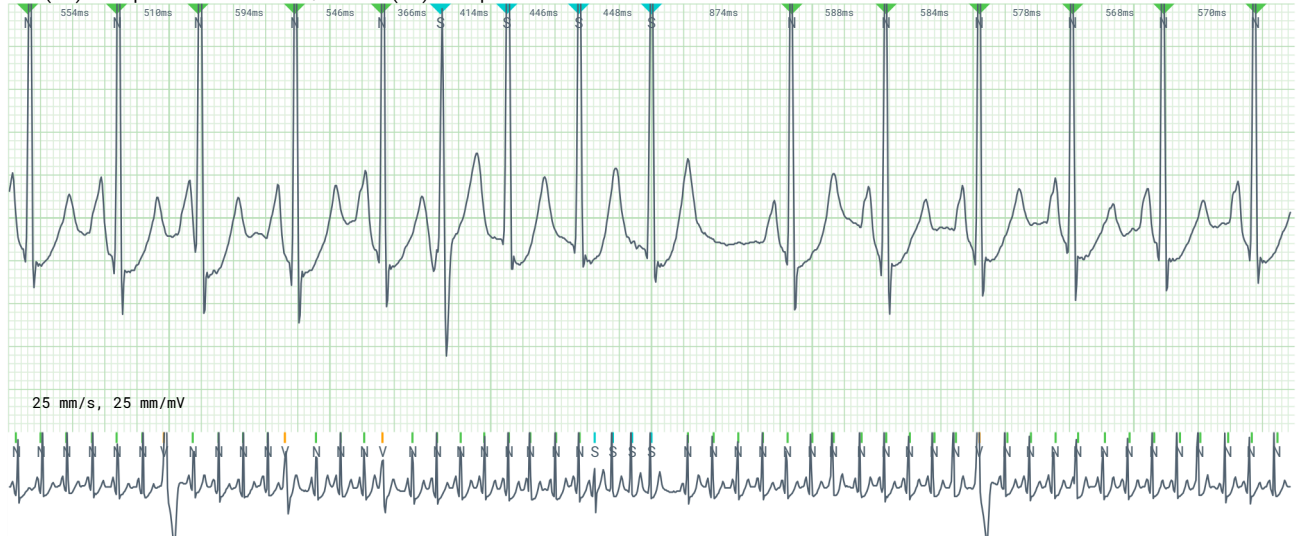
11/24/2018 11:52 AM (1") Atrial Bigeminy/Trigeminy/...

#PAC/SVE: 4 #N: 0 Ø(HR): 144bpm



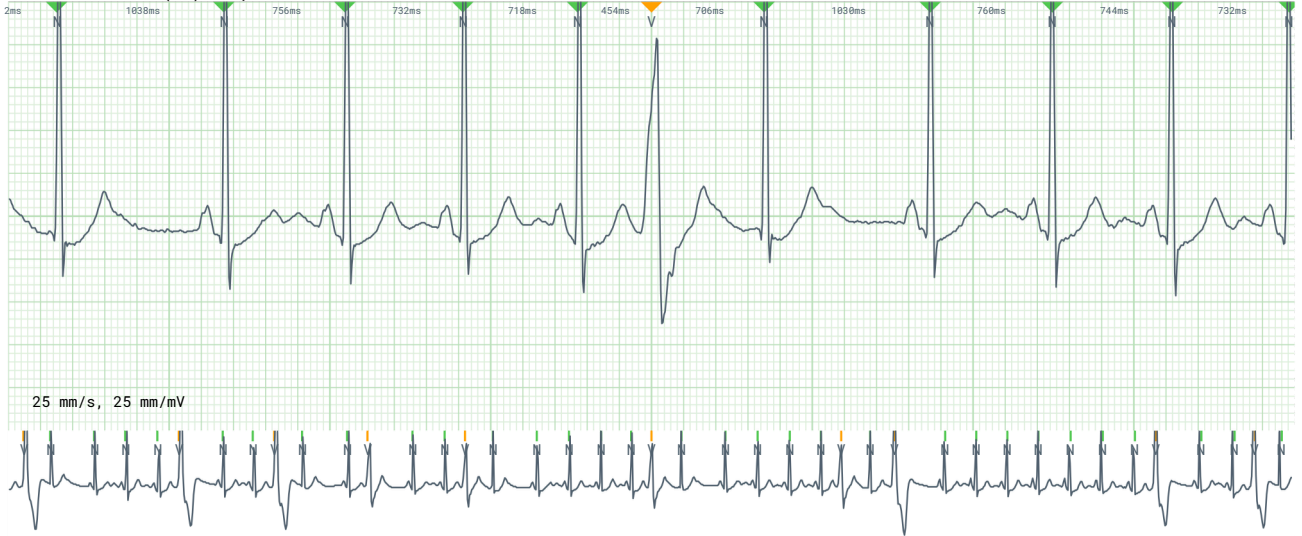
11/24/2018 11:52 AM (1") Supraventricular Tachycardia

max(HR): 144bpm Duration: 1" #PAC/SVE: 4 Ø(HR): 144bpm



11/24/2018 01:16 PM (40") Bigeminy/Trigeminy/... (multifocal)

#PVC: 16 #N: 39 Ø(HR): 81bpm



11/24/2018 07:01 PM (3") Ventricular Tachycardia

#PVC: 5 Ø(HR): 129bpm max(HR): 141bpm Duration: 3" Trigger: Sinus



11/24/2018 07:58 PM (56") Bigeminy/Trigeminy/...

#PVC: 16 #N: 52 Ø(HR): 72bpm



11/25/2018 11:25 AM (1") Salvo



Long-term ECG Report

Name | Test Data, Bittium
Date of birth | 06/12/1972 (46)

Recorded on | 11/24/2018
Recording time | 1d 1h 35'

Marked ECG strips

11/24/2018 10:56 AM 1" Marked
11/25/2018 10:16 AM 5" Marked

Duration: 1"
Example of VE
Duration: 5"
Interesting finding

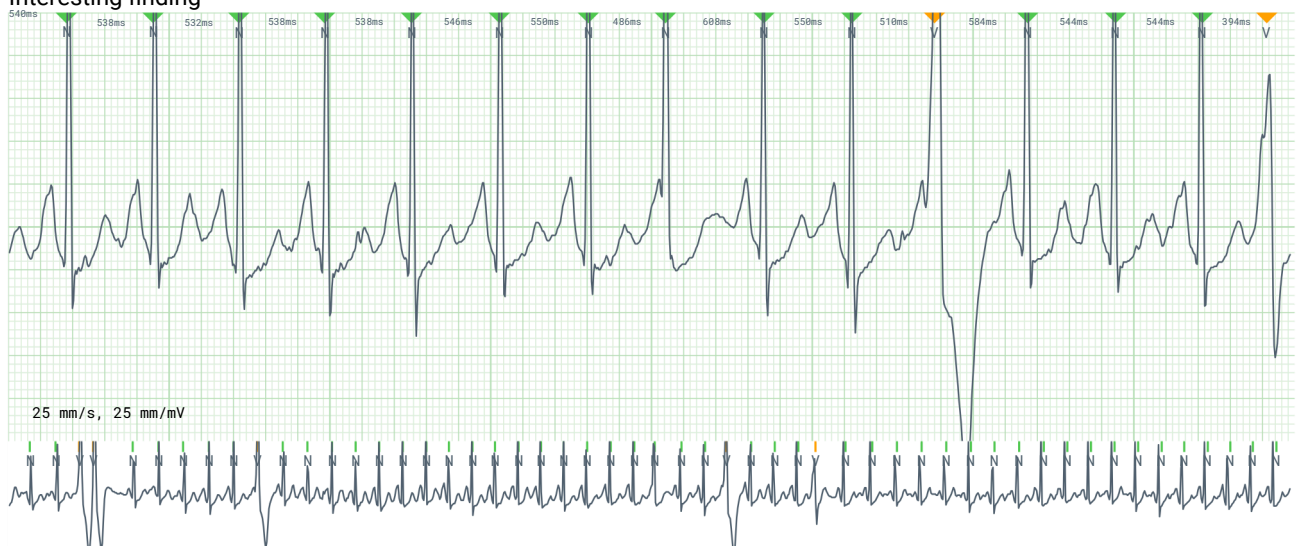
11/24/2018 10:56 AM (1") Marked

Duration: 1"
Example of VE



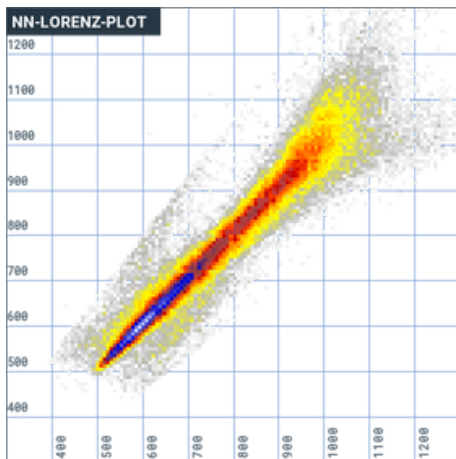
11/25/2018 10:16 AM (5") Marked

Duration: 5"
Interesting finding

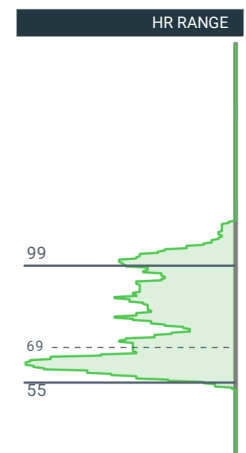


HRV Report

Name Test Data, Bittium				Recorded on 11/24/2018		
Date of birth 06/12/1972 (46)				Recording time 1d 1h 35'		
\emptyset (HR)-i	min(HR)!	max(HR)!	Δ (HR)-i	\emptyset (HR)-Day	\emptyset (HR)-Night	CI(HR)
69 bpm	54 bpm	115 bpm	43.1 bpm	86 bpm	64 bpm	1.35
Regular rhythm	SDNN	SDANN	SDNN-i	rMSSD	pNN20	pNN50
12.4 %	163.4 ms	156 LF-i norm.	77	47.3 ms	42.4 %	17.1 %
VLF-i	LF-i	HF-i	HF-i norm.	log(LF/HF)-i	Total Power-i	
2350 ms ²	1326 ms ²	1458 ms ²	52.4 %	-0.04	5370 ms ²	



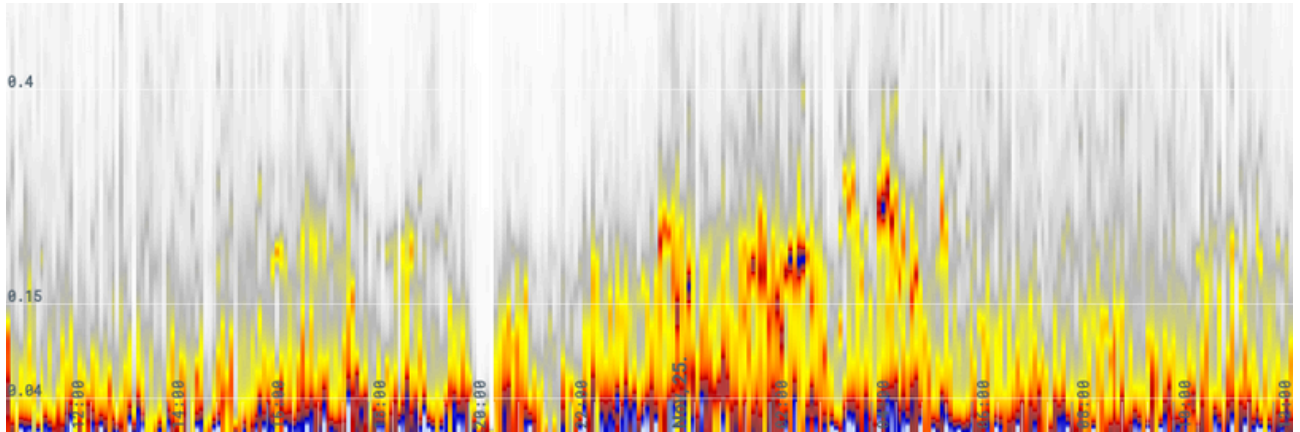
SD1	33.4ms
SD2	228.7ms
SDSD	47.2ms
TINN	1144ms
HRV index	37.1
CSI	6.9
CVI	3.9



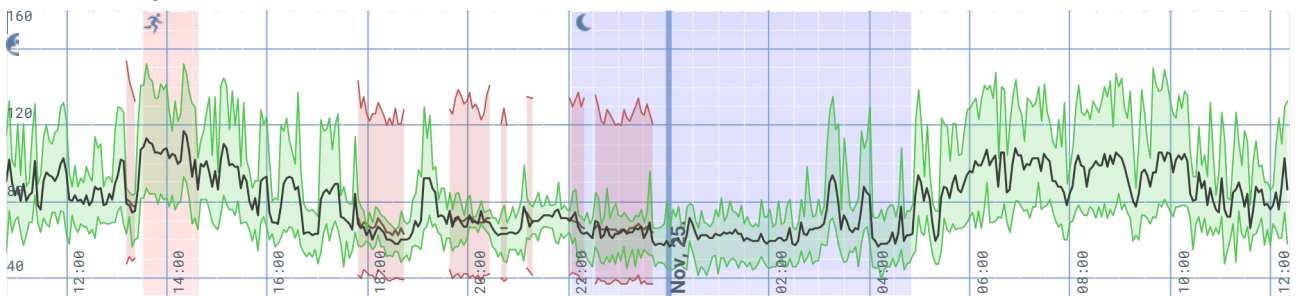
Name Test Data, Bittium
 Date of birth 06/12/1972 (46)

Recorded on 11/24/2018
 Recording time 1d 1h 35'

PowerSpectrogram



Heartrate [BpM]



Start	Comment	$\bar{\varnothing}$ (HR)	SDNN	SDANN	rMSSD	pNN50	pNN20	Σ PWR-i	log(LF/ HF)-i
		bpm	ms		ms	%	%	ms ²	
10:47 18h 49'	day/awake	86	126.1	106	38.5	12.3	29.0	3077	0.06
13:30 1h 6'	physical exercise	106	46.6	-	31.8	8.1	11.0	0	0.00
22:03 6h 45'	sleep	64	132.9	105	68.4	32.8	28.4	6305	-0.05

Long-term ECG Report

Name | Test Data, Bittium
Date of birth | 06/12/1972 (46)

Recorded on | 11/24/2018
Recording time | 1d 1h 35'

Analysis parameters

Annotation parameters	Value	Default value
Minimum NN	250 ms	250 ms
Maximum NN	2200 ms	2200 ms
Maximum increase of NN	132.5 %	132.5 %
Maximum NN drop	75.5 %	75.5 %
Ectopic beat tolerance (lambda)	1.2	1.2
Minimum cluster size	8	8
Minimum RR interval	250 ms	200 ms
Maximum RR interval	5000 ms	5000 ms
Display R-R or heart rate in strips	R-R interval (ms)	R-R interval (ms)
NOISE parameters	Value	Default value
Noise detection	Disabled	Enabled
Brady parameters	Value	Default value
HR threshold entry (day)	45 bpm	60.0 bpm
HR threshold exit (day)	48 bpm	63.0 bpm
HR threshold entry (night)	40 bpm	40.0 bpm
HR threshold exit (night)	50 bpm	50.0 bpm
Number of intervals below threshold	3 10	3 10
Minimum number of intervals		
Pause/AVBlock parameters	Value	Default value
Minimum RR (Pause)	2100 ms	2100 ms
Critical length (Pause)	2100 ms	2100 ms
PQ time threshold (AV Block 1°)	210 ms	210 ms
Episode merge factor (AV Block 2°)	60 beats	60 beats
PAC/SVE parameters	Value	Default value
Max. number of N beats between PACs	5	5
Minimum number of cycles	3	3
PVC/Runs parameters	Value	Default value
Max. number of N beats between PVCs	5	5
Minimum number of cycles	3	3
TACHY parameters	Value	Default value
HR threshold entry	150 bpm	150 bpm
HR threshold exit	140 bpm	140 bpm
Number of intervals above threshold	3 3 120	3 3 120
Minimum number of intervals	bpm	bpm
SVT HR threshold entry		



TACHY parameters	Value	Default value
SVT HR threshold exit	110 bpm	110 bpm
AF parameters	Value	Default value
AF sensitivity	Standard	Standard
Minimum duration	30 sec	30 sec
ST parameters	Value	Default value
HR limit to switch measurement point	120 bpm	120 bpm
Elevation threshold	100 μ V	100 μ V
Depression threshold	100 μ V	100 μ V
Hysteresis (off criteria)	20 μ V 15	μ V 15
Minimum length of episode	beats 5	beats 5
Beat averaging for ST level calculation	beats 25	beats 25
Max. standard deviation of averaged block	μ V 30	μ V 30
Length of reference	beats 50	beats 50
Max. standard deviation of reference block	μ V	μ V
HRV parameters	Value	Default value
Minimum Validity	90 %	90 %
Tachogram interpolation	Average	Average
Tachogram smoothing (Averaging)	0.75	0.75
Width of Window	300 sec	300 sec
Width of Interval	300 sec	300 sec
Method for Frequency analysis	FFT (Fourier Transformation)	FFT (Fourier Transformation)
Window Type	WELCH	WELCH
Detrending	true	true
FFT Length	2048 0	2048 0.0
Frequency low limit	Hz 0.003	Hz 0.003
ULF frequency limit	Hz 0.04	Hz 0.04
VLF frequency limit	Hz 0.15	Hz 0.15
LF frequency limit	Hz 0.4	Hz 0.4
HF frequency limit	Hz 64	Hz 64
Number of Poles		
3D parameters	Value	Default value
Sensor orientation	vertical (upright/standard)	-