Feature [unit]	Description	Connotation
BpE	Beats per Epoch	ECG R-R intervals detection due to noise is reflected. If ECG is noise distorted, BpE decrease . This moslty appears during AS and wake. Longer heart rate is reflected when long term windowed.
TotPow [ms^2]	Total power or variance of NN intervals of a defined window size.	Reflects overal heart rate variability [30,49]
VLF [ms^2]	The power of the very low frequency band between 0.003-0.04 Hz of a defined window size.	Oscillations in VLF are attributed to peripheral resistance fluctuations caused by thermoregulation [44].
LF [ms^2]	The power of the low frequency band between 0.04-0.15 Hz of a defined window size.	LF fluctuations are assumed to be related to baroreflex activity and under parasympathetic and sympathetic influence [40,44]. Fluctuations in the neonatal baroreceptor loop are at approximately 0.07 Hz [40,45,46].
LFnorm [%]	LF power in normalized units LF/(Total Power-VLF) x 100	Normalization, to correct for total power variability.
HF [ms^2]	The power of the high frequency band between 0.15-0.4 Hz of a defined window size.	HF fluctuations are associated with activities of the parasympathetic system and respiratory activity [42,44,45]. Respiratory activity is closely linked to preterm sleep states [7,12] and seems more prominent during quiet sleep [42].

HFnorm [%]	HF power in normalized units HF/(Total Power-VLF) x 100	Normalization, to correct for total power variability.
pHF1 [ms^2]	The power of the high frequency band between 0.4-0.7 Hz	pHF1 fluctuations are associated with activities of the parasympathetic system and respiratory activity especially in reterm infants [31].
pHF2 [ms^2]	The power of the high frequency band between 0.7-1.5 Hz	pHF2 fluctuations are associated with activities of the parasympathetic system and respiratory activity especially in reterm infants [31].
LF/HF [n.u.]	Ratio LF/HF	This estimate claims to reflect the sympathovagal balance in adults, although the value has to be established in newborns [45]. Increased values may indicate greater sympathetic and/or lesser vagal modulation [40].
SDNN [ms]	The standard deviation of normal to normal R-R intervals of a defined window length.	Reflects the overal heart rate variability influenced by both the para- and sympathectiv nervous system [30,49].
RMSSD [ms]	Root mean square of successive differences between adjacent R-R intervals of a defined window length.	Influenced mainly by parasympathetic activity and respiratory activity.
NNx [count]	The number of pairs of successive R-R intervals that differ by more than 10, 20, 30 or 50 ms of a defined window length.	NNx reflects parasympathetic activity. While NN10 covers more overall changes, NN50 represents high frequency variations with influence from respiratiory activity [54].

pNNx [%]	The proportion of NNx divided by total number of R-R intervals of a defined window length.	pNNx are directly linked to the NNx features. pNNx for values of x<50 ms may provide more robust estimates of cardiac vagal tone modulation even in the presence of outliers [54,67].