

Mote Type Year	<i>WeC</i> 1998 	<i>René</i> 1999 	<i>René 2</i> 2000	<i>Dot</i> 2000 	<i>Mica</i> 2001 	<i>Mica2Dot</i> 2002 	<i>Mica 2</i> 2002 	<i>Telos</i> 2004 
Microcontroller								
Type	AT90LS8535		ATmega163		ATmega128		TI MSP430	
Program memory (KB)	8		16		128		60	
RAM (KB)	0.5		1		4		2	
Active Power (mW)	15		15		8		33	3
Sleep Power ( $\mu$ W)	45		45		75		75	6
Wakeup Time ( $\mu$ s)	1000		36		180		180	6
Nonvolatile storage								
Chip	24LC256				AT45DB041B		ST M24M01S	
Connection type	I <sup>2</sup> C				SPI		I <sup>2</sup> C	
Size (KB)	32				512		128	
Communication								
Radio	TR1000				TR1000	CC1000		CC2420
Data rate (kbps)	10				40	38.4		250
Modulation type	OOK				ASK	FSK		O-QPSK
Receive Power (mW)	9				12	29		38
Transmit Power at 0dBm (mW)	36				36	42		35
Power Consumption								
Minimum Operation (V)	2.7		2.7		2.7		1.8	
Total Active Power (mW)	24				27	44	89	41
Programming and Sensor Interface								
Expansion	none	51-pin	51-pin	none	51-pin	19-pin	51-pin	10-pin
Communication	IEEE 1284 (programming) and RS232 (requires additional hardware)							USB
Integrated Sensors	no	no	no	yes	no	no	no	yes

Table 1: The family of motes preceeding Telos and their capabilities