

## SAT(G) Series Analog Clock

The secondary clock shall be a Sapling SAT(G\*) Series TalkBack wireless clock. It shall be an analog clock with a black hour hand, a black minute hand, and a red second hand. The clock will be capable of receiving and then re-transmitting a signal from any other Sapling device on the same frequency that transmits data using Sapling's wireless protocol. The clock shall use frequency-hopping technology to receive time data on a frequency range of either 915–928 MHz or 2.4GHz, depending on the type of transmitter that was ordered. The clock shall also be able to retransmit time data on the same frequencies: either 915-928MHz or 2.4GHz, depending on the type of transmitter that was ordered. The frequency-hopping technology shall allow the clock to transmit time data without causing interference to other wireless devices that may be transmitting at the same time. It shall use Sapling's proprietary TalkBack Technology™ to report data back to the master clock. The clock shall be designed to be used with the Sapling SMA Series Master Clock (with the TalkBack transmitter option installed) or the Sapling TalkBack Repeater. Time data shall be transmitted and received by the clock via Sapling's wireless communication protocol. The clock shall also be designed to receive and retransmit time data to Sapling's SBT(G\*\*) Series clocks and other SAT(G) Series clocks. Upon receipt of the wireless signal, the clock will immediately self-correct. The clock's transmitter shall be able to successfully transmit data over a line-of-sight, unobstructed distance of up to 1320 feet (402 meters). The clock shall include an executable method for automatic hand calibration, as well as a diagnostic function that allows the user to view the quality of the signal, the last time the clock received a correction signal, the performance and results of a gearbox test, and a comprehensive analysis of the entire clock movement. These diagnostic functions shall be enabled by pressing a button on the clock movement. The clock shall require fewer than five (5) minutes to perform a correction of the hand positions. The battery-powered model of the clock shall be capable of receiving a signal every two (2) or four (4) hours. The 24V, 115VAC or 230VAC models of the clock shall be capable of receiving a signal every minute. The clock shall have a smooth surface ABS case which can be attached either directly to the wall, or to a standard-sized gang box. The round versions of the case shall be designed such that they will fit within Sapling's wood or aluminum round clock housings. The clock case shall be produced in round cases with diameters of 9, 12, or 16 inches, or square cases with widths of 9 or 12 inches. The dial is to be made of durable polystyrene material. The crystal is to be made of shatterproof, side molded polycarbonate. The clock shall be FCC compliant, in accordance with part 15 Section 15,247.

\* (G) is used for 2.4GHz models, in which case the model code is SATG. In 900MHz models, the model name is SAT.

\*\* (G) is used for 2.4GHz models, in which case the model code is SBTG. In 900MHz models, the model name is SBT.