For cow heat detection devices on farms, MQTT or CoAP could be suitable protocols, as they are designed for low-bandwidth networks and can handle small data packets efficiently. Both protocols are also suitable for resource-constrained devices, which is important if the cow heat detection devices are small and battery-powered.

Additionally, the publish-subscribe model of MQTT could be beneficial for farms with multiple cow heat detection devices, as it allows for efficient communication between devices and a central server or cloud-based platform. CoAP's request-response model may also be appropriate for this type of application, as it allows for efficient exchange of information between the cow heat detection devices and the server.

The frequency of reading a temperature in the MLX90614 temperature sensor depends on how it is programmed and configured. The sensor can operate in two modes: continuous and single-shot.

In single-shot mode, the sensor provides a single temperature reading when it receives a trigger command from the device that is connected to it. The frequency of temperature readings in this mode depends on how often the trigger command is sent to the sensor.

the readout rate of the sensor can also vary depending on factors such as the communication protocol (I2C or SMBus), both of which have their own maximum transfer rates.