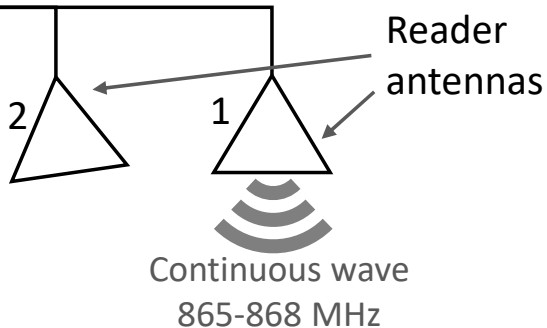


RFID reader

Receives tag signal  
Measures  $\Delta\phi$

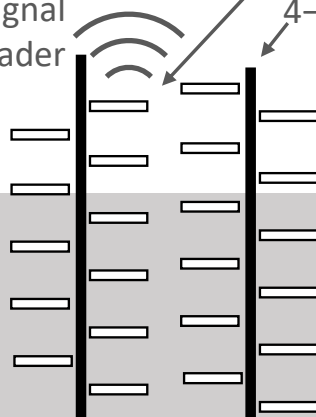


The tags backscatter their signal  
on request from the reader

23 Tags

8-158 cm

4-169 cm



The snowpack increases  
phase delay for the signal  
from tags covered by snow:

$$\Delta SWE = \frac{c}{2\pi f a} \Delta\phi$$

Snow  
Ground

