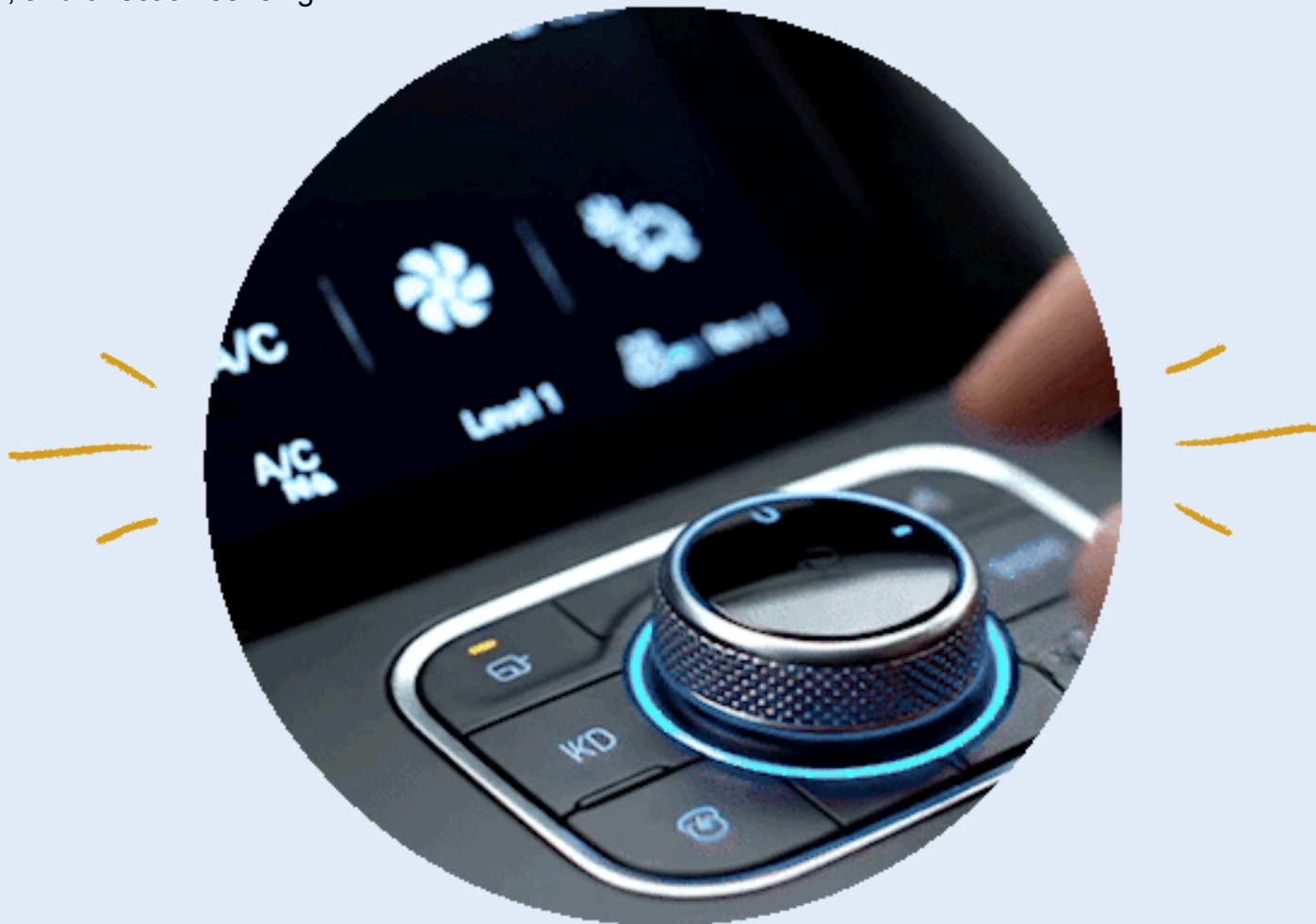


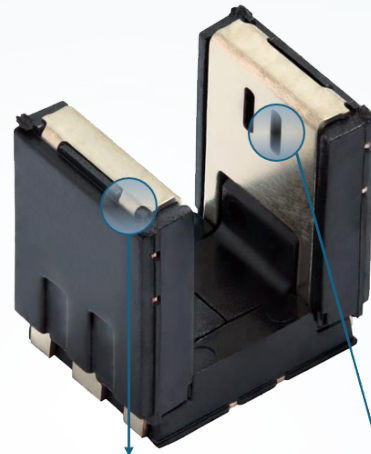
# TRANSMISSIVE SENSORS

## MINIATURE LIGHT BARRIER FOR BUTTONS AND WHEELS

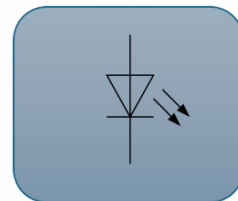
Transmissive sensors feature an infrared emitter and dual phototransistor detectors arranged face to face in a compact surface-mount package.

They are ideal for critical applications such as volume and climate control knobs, as well as precise motion, speed, and direction sensing.

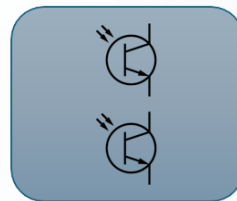




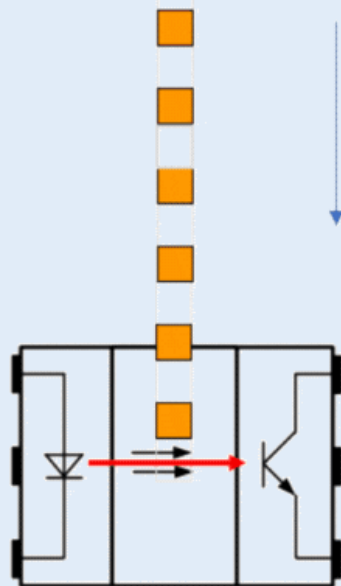
The package integrates alongside single & multiple phototransistors, each providing a distinct signal output.



Infrared Emitter



2x Phototransistors



Movement  
direction of the  
code wheel

Code wheel  
unblocked



Signal : 1

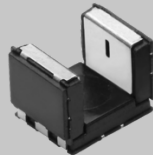
# Product Family

TCPT1300X01  
Single-Channel



(5.5 x 4.0 x 4.0 mm)

TCPT1350X01  
High Temp Release (125° C)



(5.5 x 4.0 x 4.0 mm)

TCPT1600X01  
High Dome



(5.5 x 4.0 x 5.7 mm)

VT141P  
Industrial-Grade



(5.5 x 4.0 x 4.0 mm)

VT171P  
Industrial / High Dome



(5.5 x 4.0 x 5.7 mm)

## Single-Channel Transmissive Sensor | Unidirectional Rotation Sensing

TCUT1300X01  
Dual-Channel



(5.5 x 4.0 x 4.0 mm)

TCUT1350X01  
High Temp Release (125° C)



(5.5 x 4.0 x 4.0 mm)

TCUT1600X01  
High Dome



(5.5 x 4.0 x 5.7 mm)

VT142U  
Industrial-Grade



(5.5 x 4.0 x 4.0 mm)

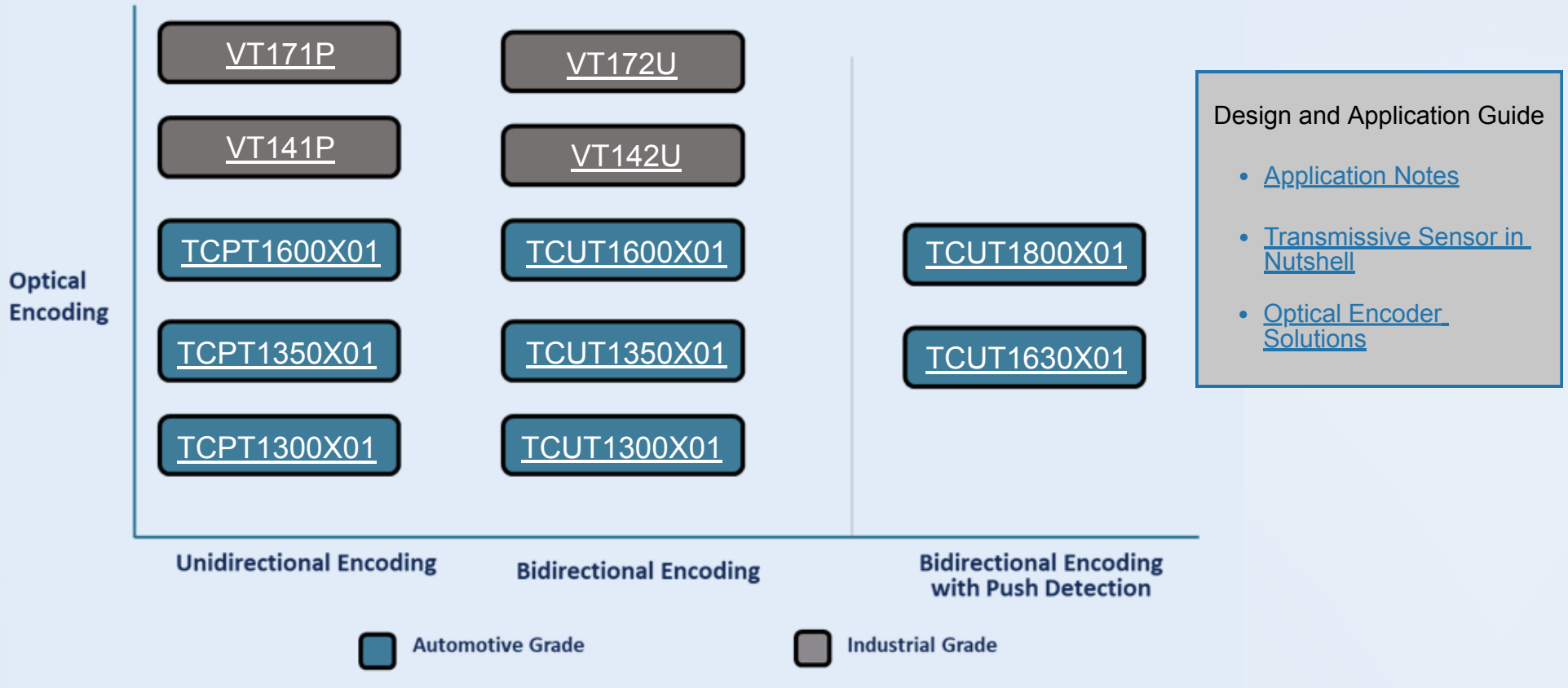
VT172U  
Industrial / High Dome



(5.5 x 4.0 x 5.7 mm)

## Dual-Channel Transmissive Sensor | Bidirectional Rotation Sensing

# Transmissive Sensors – Summary



For questions: [SensorsTechSupport@vishay.com](mailto:SensorsTechSupport@vishay.com)