

# 01 Making machines talk!

The best way to communicate with in-vehicle Transit and Public Safety applications.

## iCouples ( Ubi-LAP2000 )

- iCouples is 4G router for in-vehicle Transit and Public Safety applications.
- It is high speed 4G / LTE and WiFi broadband connectivity for all transit agencies (buses, light rail and train) and first responders (police, Fire/EMS...) for multimedia managed services including video, telemetry, passenger services, patient monitoring on emergency vehicle.
- It enables downlink data rate up to 100 Mbps and uplink data rates up to 50 Mbps through LTE networks.
- Frequency : 2.4 GHz WiFi ( 802.11 b/g/n )
- interface : 2 X RJ-45 for 10/100 Mbps LAN ports  
1 X USB2.0 Port  
1 X RJ-45 for 10/100 Mbps WAN port  
2T2R 2.4 GHz / LTE Antenna
- Key feature  
WEP/WPA/WPA2 and 802.1x Auth.  
NAT and DHCP  
Supports VPN pass-through



## LTE / WCDMA Module

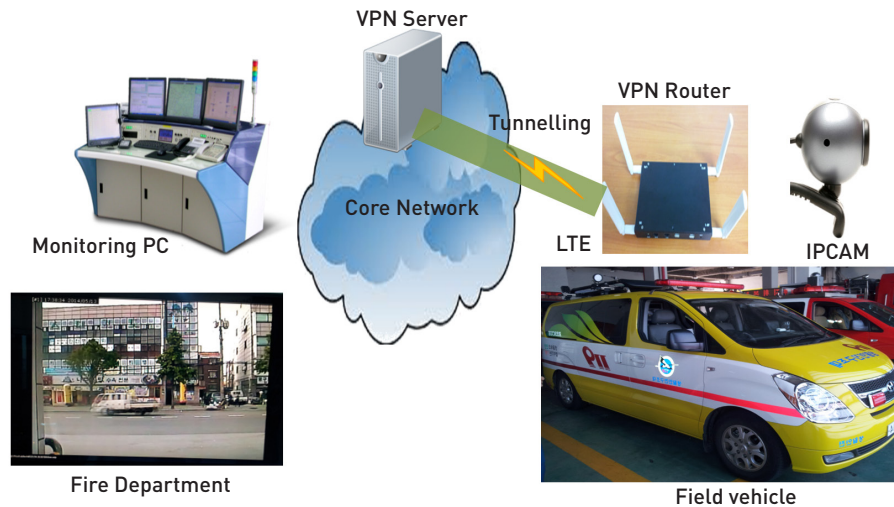
- Data Services  
D/L : LTE 100 Mbps, HSPA+ 42 Mbps  
U/L : LTE 50 Mbps, HSPA+ 11 Mbps
- Qualcomm MDM9215 chipset
- Frequency Band  
LTE 850/1800 MHz  
WCDMA 2100 MHz
- Max RF output power  $\geq 22$  dBm
- Receiver Sensitivity  $\leq -97$  dBm(10MHz@Rb50 )
- Environments  
Operating temperature: -20°C to 60°C  
Storage temperature: -30°C to 85°C

## Mechanicals

- Dimension (WxHxT): 150 x 110 x 30 (mm)
- Antenna Connector for RF
- Input Power : 12 V
- Power Consumption : 10W(Max) / Normal (3~4W)

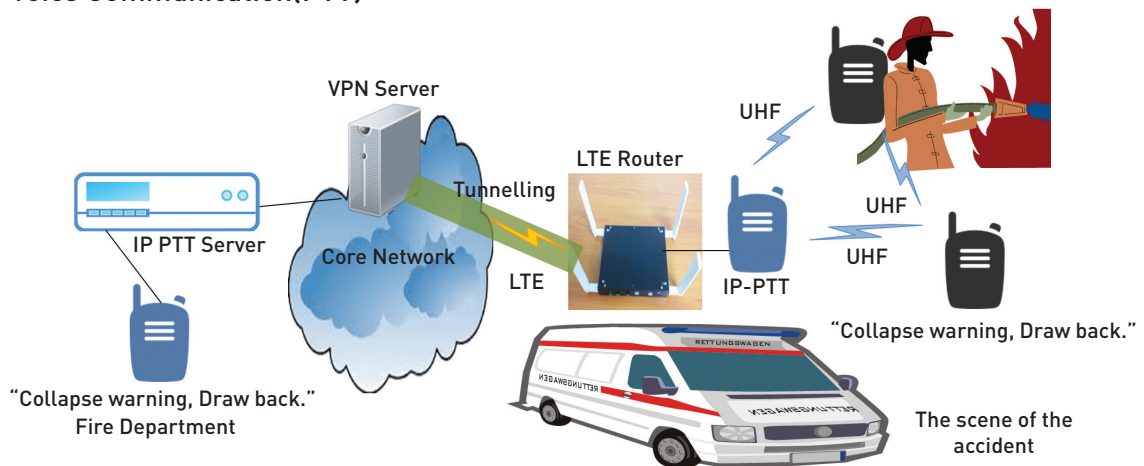
## Applied Examples / References

### • Video Surveillance



- **Screen-streaming control using the VPN Gateway in the emergency vehicle.**
  - Test trial period: May 2014 ~ June 2014 (two months)
  - Construction location: Incheon Fire Department.
  - The number of service utilization: 262 times/ two months (average daily use: 4~5 times).
- **Vehicle mounts the Incheon Asian Games Torch.**
  - Test trial period: July 2014 ~ September 2014 (two months)
  - Service: Incheon Fire Department, Counterterrorism task force, controlled by the Incheon Asian Games Organizing Committee (Songdo).

### • Voice Communication(PTT)



Communicate with the fire department through iCouples interworking with IP-PTT.

Construction location: The fire department, Ganghwa-gun, Incheon.