

TELECELL: UNIVERSAL STREETLIGHT CONTROLLER

OVERVIEW

Telensa's telecell is the world's most deployed wireless streetlight controller, with a footprint of more than 1.5 million nodes and 7 years of continuous service. No larger than a regular photocell, telecell variants are available for every type of streetlight, including decorative fixtures.

Long range system – non-line-of-sight range up to 10 miles (16km)

Very low power consumption – up to 4x less than mesh networks

GPS plots lights in central management system and in asset management map system

Revenue grade meter system for time-of-use energy consumption



Full coverage – relay function means all lights and street furniture covered

Robust – operates normally and logs activity even when disconnected from the network

Resilient – automatically connects to best available base station, always covered by multiple base stations

NFC chip and smart device app for no-touch provisioning





| | | NEMA | Conduit | 2-Part | Post Top | 480 V Roadway |
|---------------|---------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| Regulatory | Standards available | FCC/ETSI/UL | FCC/ETSI | FCC/ETSI/UL | FCC/ETSI/UL | FCC/UL |
| | Country approvals | Contact Telensa for detail | Contact Telensa for detail | Contact Telensa for detail | Contact Telensa for detail | Contact Telensa for detail |
| | Manufacturing | ISO9001 and ISO14001 | ISO9001 and ISO14001 | ISO9001 and ISO14001 | ISO9001 and ISO14001 | ISO9001 and ISO14001 |
| Radio | Protocol | UNB | UNB | UNB | UNB | UNB |
| | Supported bands; International: | 910.0 – 923.5MHz | 910.0 – 923.5MHz | 910.0 – 923.5MHz | 910.0 – 923.5MHz | 910.0 – 923.5MHz |
| | EU: | 868.0 – 869.6MHz | 868.0 – 869.6MHz | 868.0 – 869.6MHz | 868.0 – 869.6MHz | 868.0 – 869.6MHz |
| | Receiver sensitivity (minimum) | -124dBm | -124dBm | -124dBm | -124dBm | -124dBm |
| | Transmit power (Maximum ERP) | 25 – 100mW | 25 – 100mW | 25 – 100mW | 25 – 100mW | 25 – 100mW |
| Environmental | IP rating | IP66 | IP66 | IP66 | IP66 | IP66 |
| | IK rating | IK07 | IK06 | IK05 | IK07 | IK07 |
| | Temperature (°C/ °F) | -40 to +70 / -40 to +158 | -40 to +70 / -40 to +158 | -40 to +70 / -40 to +158 | -40 to +70 / -40 to +158 | -40 to +70 / -40 to +158 |
| Power | Voltage | 110V – 277V | 110V – 277V | 110V – 277V | 110V – 277V | 347 – 480V |
| | Consumption | 0.85W | 0.85W | 0.85W | 0.85W | 0.85W |
| | Switching | 10A | 10A | 10A | 10A | 5.5A |
| | Dimming (on-board) | 0 – 10v or DALI | 0 – 10v or DALI | 0 – 10v or DALI | 0 – 10v or DALI | 0 – 10v or DALI |
| | Surge protection | 320VAC 10kA device | 320VAC 10kA device | 320VAC 10kA device | 320VAC 10kA device | 550VAC 22kA device |
| Metering | Accuracy | Revenue grade | Revenue grade | Revenue grade | Revenue grade | Revenue grade |
| Processing | Metrology engine | Separate 32bit Arm processor | Separate 32bit Arm processor | Separate 32bit Arm processor | Separate 32bit Arm processor | Separate 32bit Arm processor |
| | Main application engine | Separate 32bit Arm processor | Separate 32bit Arm processor | Separate 32bit Arm processor | Separate 32bit Arm processor | Separate 32bit Arm processor |
| Physical | Connections | 5/7 PIN (ANSI C136.41) 3 PIN (ANSI C136.10) | 5 wire (dimming) 3 wire (on/off only) | 5 wire (dimming) 3 wire (on/off only) | 5/7 PIN (ANSI C136.41) 3 PIN (ANSI C136.10) | 5/7 PIN (ANSI C136.41) 3 PIN (ANSI C136.10) |
| | Dimensions (H x D) | 58.6x 86.6mm [2.31 x 3.41"] | 58.6x 86.6mm [2.31 x 3.41"] | 34 x 89mm [1.34 x 3.5"] | 58.6x 86.6mm [2.31 x 3.41"] | 113.5x 87.9mm [4.47 x 3.46"] |
| | Antenna | Internal | Internal | External* (purchased seperately) | External* (purchased seperately) | Internal |
| GPS | Receiver type | 167 channels L1,C/A code | 167 channels L1,C/A code | 167 channels L1,C/A code | 167 channels L1,C/A code | 167 channels L1,C/A code |
| | Update rate | 40Hz | 40Hz | 40Hz | 40Hz | 40Hz |
| | Acquisition timing | Hot start 1 second TTFF Cold start 29 seconds TTFF | Hot start 1 second TTFF Cold start 29 seconds TTFF | Hot start 1 second TTFF Cold start 29 seconds TTFF | Hot start 1 second TTFF Cold start 29 seconds TTFF | Hot start 1 second TTFF Cold start 29 seconds TTFF |
| | Assisted GP | Incl. 3.5 s TTFF / 7 day | Incl. 3.5 s TTFF / 7 day | Incl. 3.5 s TTFF / 7 day | Incl. 3.5 s TTFF / 7 day | Incl. 3.5 s TTFF / 7 day |
| | Multipath | Supported | Supported | Supported | Supported | Supported |
| NFC | Read range | 15mm | 15mm | 15mm | 15mm | 15mm |
| | Frequency | 13.56Mhz | 13.56Mhz | 13.56Mhz | 13.56Mhz | 13.56Mhz |

*External antenna options

| | | |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <p>Twig</p>  <p>H: 102mm [4.02"]</p> | <p>Low profile</p>  <p>H: 104mm [4.09"]</p> | <p>Easy-fit</p>  <p>H: 130mm [5.12"]</p> |
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Disclaimer: This information is believed to be correct at the date of issue and is subject to change at any time.

HQ AND EMEA

Telensa Limited, Iconix 3, London Road,
Pampisford, Cambridge, CB22 3EG, UK
Sales & General +44 (0)1799 588800
Support +44 (0)1799 399200
support@telensa.com

AMERICAS

Telensa Inc., 1200 Abernathy Road, Building
600, 17th Floor Atlanta, GA, 30328, USA
Sales +1 770 551 8156
Support +1 855 399 7900
support@telensa.com

ASIA PACIFIC

Telensa Systems Pty Ltd., Level 17,
383 Kent Street, Sydney, NSW 2000,
Australia
Sales +61 451 336 135
Support support@telensa.com