HONEYWELL NAVITAS™ LIGHTS MANAGER

Airfield Lighting Control and Monitoring System
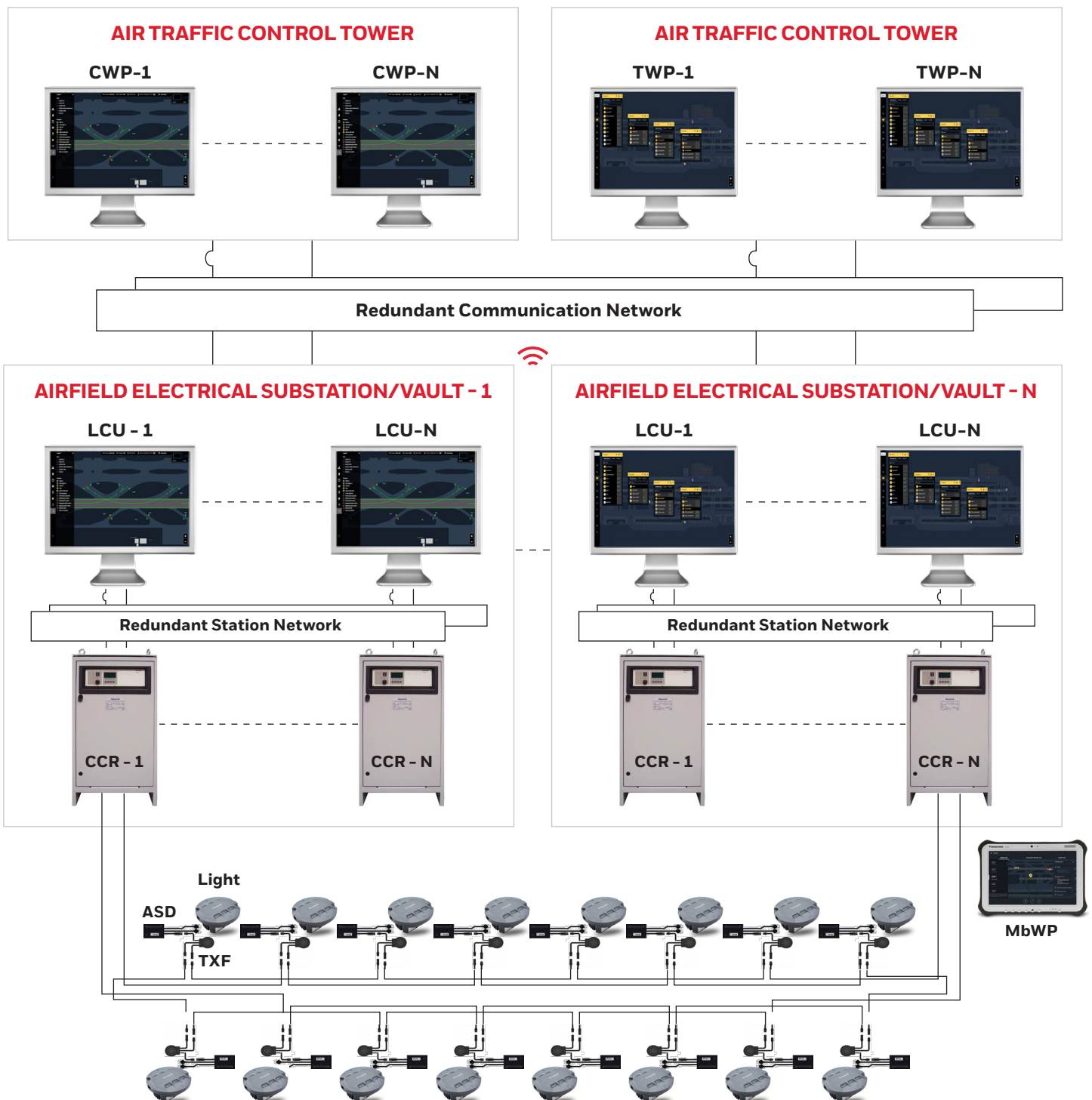
Honeywell

Honeywell NAVITAS™ Lights Manager is a next-generation, purpose-built software platform for airfield lighting control and monitoring. A highly modular system, Lights Manager is a cost-effective solution designed to meet the needs of both regional and large international airports, with complete surface movement guidance systems supported by ground lighting systems.

Honeywell NAVITAS Lights Manager is a distributed, scalable computer system that gives you control and monitoring of airport lighting equipment, with high-speed operation, redundancy, and easy subsystem integration. It offers touchscreen HMIs for ATC and airfield engineering, with numerous functions to make daily work easier and more efficient, while ensuring airport lighting systems can be optimally monitored.

Compliance with standards:
- Compliance to ICAO Annex 14, Vol. 1, para. 5.3 and 8.3 and Aerodrome Design Manual part 5, para. 3.4 and 3.7
- Certified for FAA AC 150/5345-56B Current Edition: L-890
- Transport Canada Aerodrome Standards
- EASA

AIR TRAFFIC CONTROL TOWER

CWP-1   CWP-N

AIR TRAFFIC CONTROL TOWER

TWP-1   TWP-N

Redundant Communication Network

AIRFIELD ELECTRICAL SUBSTATION/VAULT - 1

LCU - 1   LCU-N

AIRFIELD ELECTRICAL SUBSTATION/VAULT - N

LCU-1   LCU-N

Redundant Station Network

Redundant Station Network

CCR - 1   CCR - N

CCR - 1   CCR - N

Light

ASD

TXF

MbWP

STANDARD SYSTEM FEATURES

SYSTEM DESIGN

- Lights Manager software is object-oriented and complies with the latest international standards for the communication and design of open system interfaces.

- Operates on Linux operating system and uses commercial off-the-shelf servers, network equipment, monitors and accessories.

- Fully complies with cybersecurity standard ISA 62443-4-2, with TLS 1.3 enabled for secure communication.

- Key components of this distributed server system: Central management computers and station management computers. These are deployable in redundant setups, and supported by dedicated HMIs for ATC, as well as for engineering at maintenance center / electrical substations / vaults, and for field engineers.

- The HMI follows human-centered design principles to provide innovative ergonomic distribution of functions: Primary functions are placed in upper areas, while seldom-used functions are placed in lower areas. This improves overall operational comfort while also reducing the amount of space required. All workstations are equipped with an extensive, context-sensitive help system.

ATC HMI – CONTROLLER WORKING POSITION

- The Lights Manager CWP HMI offers a multitude of functions to efficiently enable time-critical control and monitoring of airfield lighting equipment (as well as interfaced systems like surveillance sensors, docking systems, NAVAIDs, weather systems, etc.), without information overload.

- Delivered on high-resolution and fast-response touchscreens, with a true-scale airfield map and control lighting for approach, runway, taxiway, apron and other special lighting systems; category of operations, airport mode of operations; area of responsibility; utilities control; alarm window for serviceability and alerts/alarms notifications; maintenance workflow authorization.

- Enables direct access to a layered and hierarchically organized virtual operating area. Operating functions as well as picture and text displays are accessible.

- Realizes the airfield concept of operation with modern, rule-based routing procedures.

Figure: Controller Working Position (CWP)

STANDARD SYSTEM FEATURES

MAINTENANCE HMI –
TECHNICAL WORKING POSITION

- The Lights Manager TWP HMI offers comprehensive monitoring of lighting and control systems, helping maintenance personnel receive early warning of technical issues.

- Navigator makes it easy to display and manage large amounts of information quickly and clearly. For example, when a particular lighting station is selected, all information regarding its control units and lamps will be displayed.

- Event database captures a multitude of data like logins, alerts/alarms, electrical parameters of assets, insulation values, switch actions, changes to configuration, operating hours, etc.

- TWP also enables report printing or exporting to enterprise systems, as well as report analysis, and list generation.

- Coordinate closure of areas with ATC for maintenance activities.

- Schedule maintenance management activities, generate work-orders, and monitor closures.

- Station/vault HMI or LCU offers comprehensive monitoring of the lighting and control systems specific to the vault. The workstation also enables control for all aspects of the system, down to controlling individual lamps.
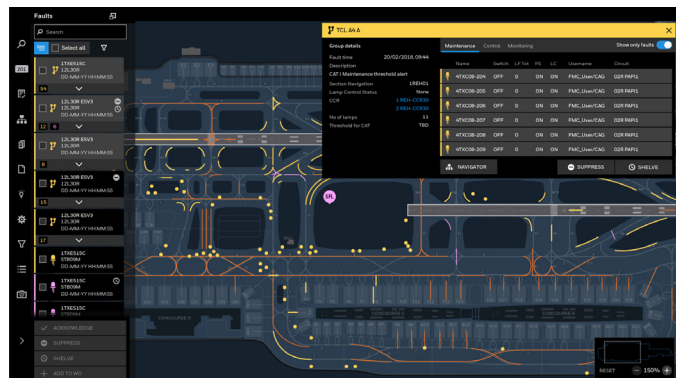
MOBILE WORKING POSITION HMI

- The Lights Manager MbWP HMI offers comprehensive monitoring of the lighting and control systems for maintenance personnel in the field, enabling them to receive details of technical issues, work-orders, access to documentation and standard operating procedures, etc.

APPLICATION

- Certified to all four levels of AC 150/5345-56B. Lights Manager is offered with the following monitoring options – Control Only; Basic Monitoring; Advanced Monitoring; SMGCS ready.

- Supports fail-safe operations – Preset state and Last state.

Figure: Technical Working Position (TWP)

Figure: Mobile Working Position (MbWP)

PRODUCT CODE ORDERING

LMGR - L-890

X   X

MONITORING OPTIONS

A. Control Only

B. Basic Monitoring

C. Advanced Monitoring

D. SMGCS Ready

FAIL-SAFE OPTIONS

A. PRESET

B. LAST STATE

Contact Honeywell Sales to discuss our ALCMS system and receive a full quote that meets the needs of your airport configuration.

Additional options can be added to standard model:

- CWP & TWP touch or non-touch screens sizes – 15-inch, 19-inch, or 22-inch.

- CCR Control – Modbus TCP/IP, Parallel IO etc.

- Circuit/Lamp Control – Circuit Selector Switch or Single Lamp Control & Monitoring

- Ancillary System Monitor & Control – Genset, RVR, WDI, NAVAID Systems, Stopbar Sensors, Beacons, Obstruction lighting, Radio Control etc.

For more information

https://buildings.honeywell.com/us/en/industries/airports

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THE
FUTURE
IS
WHAT
WE
MAKE IT

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