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Building	Planning
Engineering	Public Works
Fire	Traffic

1106 54TH AVENUE EAST, TACOMA, WA 98424

MERIDIAN MARKET 721 AES RADIO

4423 S. MERIDIAN AVE E, #721
PUYALLUP, WA 98373

PARCEL: 04191065022

SFS PROJECT# FA22100

OVERVIEW

THE SCOPE OF THIS PROJECT IS TO INSTALL AN AES RADIO IN SUITE 721.

City of Puyallup
Fire
REVIEWED FOR COMPLIANCE
DDrake
11/03/2022
7:37:42 AM

Approval of submitted plans is not an approval of omissions or oversight by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable building codes and regulations of the local government.

THE APPROVED CONSTRUCTION PLANS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

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3. AES (7707P-88-ULP-M) RADIO

4. DURACELL (DURA12-12F2) BATTERY

SCOPE OF WORK:

THE SCOPE OF THIS PROJECT IS TO INSTALL AN AES RADIO IN SUITE 721.

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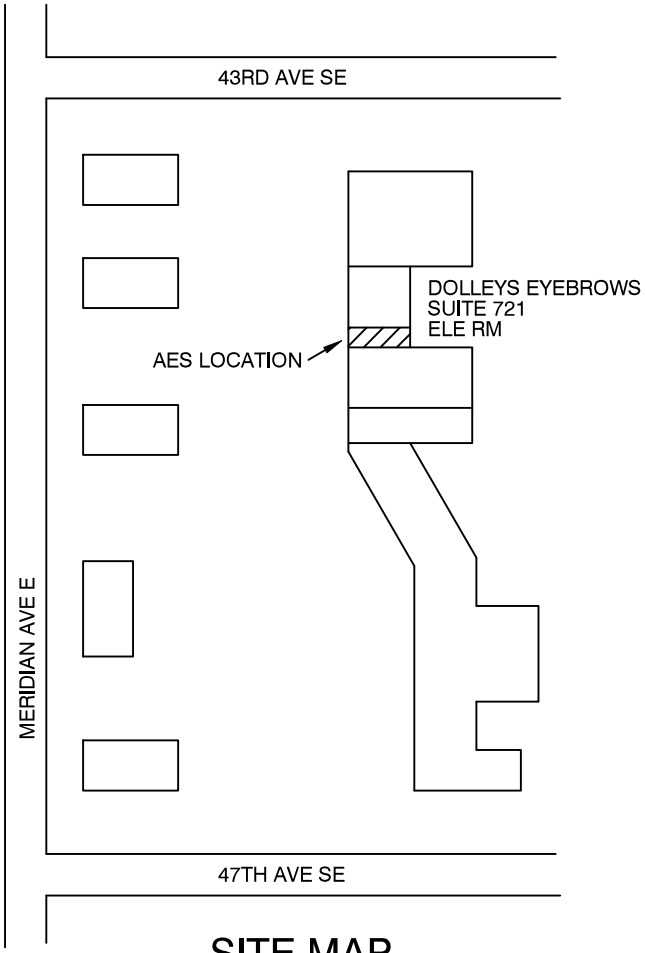

SITE MAP

PARCEL# 04191065022

DESIGNER:	JEF MARQUEZ
DATE:	10/7/22
AHJ:	PUYALLUP
JOB#:	FA22100
SHEET#:	FA1 OF 1

SMITH FIRE SYSTEMS, INC.

1106 54TH AVE EAST
TACOMA, WA 98424
SMITHFS861RS

OFFICE (253) 248-2004
FAX (253) 926-0726

MERIDIAN MARKET 721 AES RADIO
4423 S. MERIDIAN, SUITE 721, PUYALLUP 98373

JEF MARQUEZ
NICET LEVEL IV
FIRE ALARM SYSTEMS
CERT #119820
EXP 7/1/25

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Intelligent Fire Alarm Control Panel

IFP-300 / IFP-300B

The IFP-300 (red) and IFP-300B (black) are intelligent analog/addressable Fire Alarm Control Panels (FACP). The basic IFP-300 panel contains one built in signaling line circuit (SLC), which can support 159 IDP/SK sensors and 159 IDP/SK modules or 127 SD devices per loop. Additional SLC loops can be added using the model 6815 SLC expander for System Sensor devices to increase the overall point capacity to a maximum of 300 points per panel, or model 5815XL for Hochiki devices to increase the overall point capacity to a maximum of 254 points per panel.

IFP-300 has the interconnection capability for up to 32 panels. The system has two modes of operation, multiple panels covering one larger building, or multiple independent buildings. To network panels together use the SK-NIC network interface card. Copper wire or fiber optic cable panel connectivity can be used within the same networked system.

IFP-300 has a built-in dual phone line, digital alarm communicator/ transmitter (DACT), IP or optional cellular technologies, Form C trouble relay, and two programmable Form C relays. IFP-300 has powerful features such as detector sensitivity, day/night thresholds, drift compensation, pre-trouble maintenance alert, and calibration trouble alert.

The IFP-300 supports a variety of devices, including RA-2000, RA-1000 or RA-100 remote annunciator, 5824 serial/ parallel printer interface module (for printing system reports),

IFP-300B

FEATURES & BENEFITS

- Network support for up to 32 Sites
- Built-in support for up to 159 IDP/SK detectors and 159 IDP/SK modules or 127 SD SLC devices
- Four line LCD display with 40 characters per line
- Available in a red or black cabinet
- IFP-300 can be surface or flush mounted
- Built-in USB interface for programming
- Firmware can be upgraded in the field
- Renewable license on downloading software helps inhibit unauthorized programming
- Network card allows copper network connection with a multi-mode or single-mode fiber connection option
- Built-in dual phone line, digital alarm communicator/ transmitter (DACT), IP or optional cellular technologies
- JumpStart AutoProgramming® feature for easy programming
- Supports up to four SWIFT wireless gateways. Each gateway can have up to 49 wireless devices
- Supports Class B (Style 4) and Class A (Style 6 or Style 7 configuration for SLC, and SBUS.
- Built in synchronization for appliances from AMSECO, Gentex®, System Sensor®, and Wheelock

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IFP-300 Technical Specifications

SPECIFICATIONS

Physical:

Overall Dimensions: 26.4" H x 16.4" W x 4.11" D

Weight: 45 lbs.

Color: Red or Black

Environmental Operating Temperature: 32°F to 120°F (0°C to 49°C)

Humidity: 0 to 93% relative humidity (non-condensing)

ELECTRICAL:

IFP-300 Primary AC: 120 VAC @ 60 Hz, 3.3A Total Accessory Load: 6A @ 24 VDC power-limited

Standby Current: 190 mA

Alarm Current: 250 mA

Battery Charging Capacity: 17 to 55 AH

Battery Size: 18 AH max. allowed in control panel cabinet. Larger capacity batteries can be housed in RBB accessory cabinet.

APPROVALS

NFPA 13, NFPA 15, NFPA 16, NFPA 70, & NFPA 72: Central Station; Remote Signalling; Local Protective Signalling Systems; Auxiliary Protected Premises Unit; & Water Deluge Releasing Service

Other Approvals:

UL Listing; CSFM (pending); COA (pending); OSHPD (CA) (pending), FM (pending)

APPROVED RELEASING SOLENOIDS

Asco	T8210A107	24 VDC	3 A max	0 Hz
Asco	8210G207	24 VDC	3 A max	0 Hz

COMPATIBLE DEVICES

See the data sheets listed below for a complete listing of the IDP, SK, SWIFT or SD devices.

- 350361 - IDP Device Protocol data sheet
- 53623 - SK Device Protocol data sheet
- 350360 - SD Device Protocol data sheet
- 350615 & 350617 - SWIFT devices data sheet

ORDERING INFORMATION

IFP-300 - Intelligent Fire Alarm Control Panel. Red

IFP-300B - Intelligent Fire Alarm Control Panel Black

SBUS ACCESSORIES

RA-2000, RA-1000, RA-1000R, RA-100, RA-2000GRAY - Remote annunciators

6815 - Signal Line Circuit (SLC) Expander for IDP/SK devices

5815XL - Signal Line Circuit (SLC) Expander for SD devices

RPS-1000 - Power Supply

5496 - NAC Expander

5824 - Serial/Parallel Module

5880 - LED I/O Module

5865-3/-4 - LED Annunciator

5883 - Relay Interface

MISCELLANEOUS ACCESSORIES

SKSS-3 - Software Suite. Provides programming, upload/download and event reporting

RBB - Remote Battery Box Cabinet. Use for backup batteries up to 35 AH.
Dim: 16" W x 10" H x 6" D

SK-SCK - Seismic Compliance Kit

SK-NIC - Network Interface Card

SK-NIC-KIT - Network Interface Card in Cabinet

SK-FML - Multi Mode Fiber Card

SK-FSL - Single Mode Fiber Card

CELL-MOD - Cellular Communicator in Plastic Enclosure

CELL-CAB-SK - Cellular Communicator in Metal Enclosure with lock and key

For a complete listing of all compliance approvals and certifications, please visit www.farenhyt.com.

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This document is not intended to be used for installation purposes. We try to keep our product information up-to date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

For Technical Support, Please call 800-446-6444.

For more information

www.farenhyt.com

Honeywell

12 Clintonville Road
Northford, CT 06472
800-328-0103
www.farenhyt.com

Doc 351603 | Rev A | 05/17
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Honeywell

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aes-corp.com

AES CORPORATION 40 Years of SECURITY INNOVATION

7707 Fire Subscribers

IntelliNet 2.0

A Newer, Smarter Alarm Communications Platform

Feature Highlights

- Leverages state of the art technology
- Applies advanced security protection
- Offers flexible power and configuration options
- Engineered for backward compatibility with legacy systems
- Enables future ready capabilities
- Provides instant subscriber status through front panel with Power and Trouble LEDs, a backlit LCD display, and Menu/Silence button
- Includes robust Multiple Communication Technologies (MCT) feature
- Emulates virtual keypad
- Improves functionality with an adaptive Graphic User Interface (GUI) for programming via smartphones, tablets and PCs
- Plus many more...

Key Benefits

- Built upon the solid foundation of AES-*IntelliNet* patented mesh radio technology for use in private licensed wireless networks
- Protects subscriber units against unauthorized access and rogue activity with a password-protected Dealer Code
- Makes programming and streamlined troubleshooting easy with user friendly interface
- Adds integrated supervision of AES-*IntelliPro* full data module
- Provides versatile power options:
  (1) Direct from the Fire Alarm Control Panel (FACP) without requiring an electrician onsite and without Subscriber backup battery;
  (2) Directly from the FACP with Subscriber backup battery; or
  (3) Traditional installation with plug in Class 2 low power transformer
- Allows for enhancement upgrades and an expanded number of new features to be added easily with highly flexible and scalable alarm communications infrastructure
- Rigorously tested to the highest industry standards and future ready to meet emerging NFPA code and UL standards

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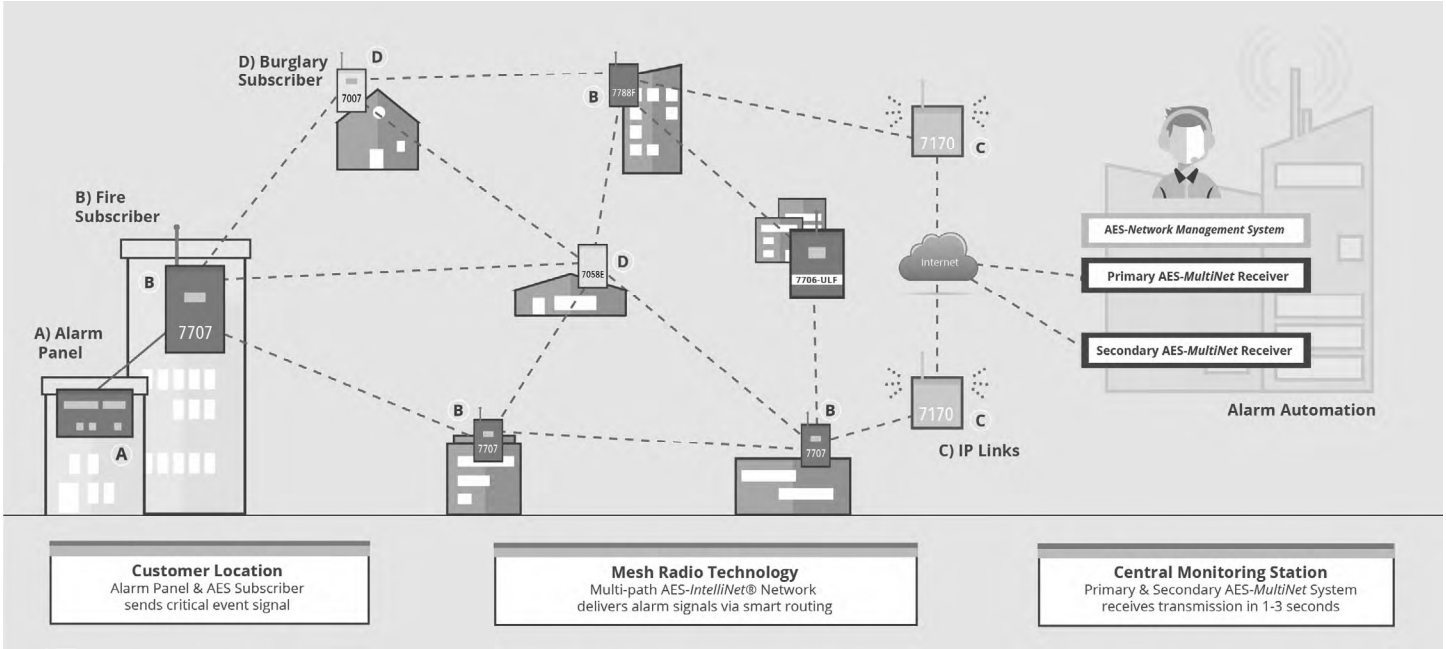
Enhanced Wireless Fire Alarm Monitoring

Powered by AES enhanced mesh radio technology, *IntelliNet* 2.0 7707 Fire Subscribers are next generation universal wireless communicators that provide advanced security protection for any new or existing alarm monitoring network. The AES Model 7707 is ideal for commercial fire applications. With the AES-*IntelliPro* full data module option, they are the ideal drop-in replacement for Plain Old Telephone Service (POTS) lines.

The red metal enclosure comes with a key lock and front panel LCD backlit display with intuitive view that provides an instant visual of the subscriber status. The user friendly GUI makes it easy to program AES subscriber units via a smartphone, laptop, tablet, or integrated Universal Serial Bus (USB)—without the need for special cables or having to use a handheld programmer. Additional knockouts make it easier to mount for faster installation.

IntelliNet 2.0 Private Wireless Mesh Radio Network



The *IntelliNet* 2.0 Fire Subscriber has an 8 Zone modular design for expansion with normal and reverse polarity, POTS and DACT interfaces with an option for the 7794A AES-*IntelliPro* full data module add-on accessory board. AES subscribers' intelligent software automatically detects new hardware and devices to reduce installation time.

An AES certified WiFi accessory allows seamless wireless connectivity for configuration and programming. A laptop, Ethernet cable, or a Wi-Fi USB dongle is required for *IntelliNet* 2.0 programming, handheld programmers will not work with 2.0 units. A FACP Power Supply Adapter is required for certain configurations when using flexible power options. The forward compatible design allows for feature add-ons, engineered to adapt seamlessly with future software upgrades as technology advances. *IntelliNet* 2.0 allows configuration cloning for faster installation time.

The AES 7707 was designed with quick configuration and installation in mind to make it easier for field technicians to get in, out, and on to the next install.

Visit our Fire Marshal Resources web page for official NFPA and UL Listings:
aes-corp.com/products/fire/fire-marshal-resources

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IntelliNet 2.0 Fire Subscribers	
2.0 PREMIUM (UL & ULC Listed)	
7707P-88-M	*IntelliNet* 2.0 Fire Subscriber, 8 Zone with Multiple Communication Technologies (MCT), Red Enclosure
7707P-88-ULP-M	*IntelliNet* 2.0 Fire Subscriber, 8 Zone with 7794A AES-*IntelliPro*, and integrated onboard Local Annunciator plus MCT, Red Enclosure
7707P-44-M	*IntelliNet* 2.0 Fire Subscriber, 4x4 Zone (4 Reversing Polarity, 4 Supervised) with Multiple Communication Technologies (MCT), Red Enclosure
7707P-44-ULP-M	*IntelliNet* 2.0 Fire Subscriber, 4x4 Zone (4 Reversing Polarity, 4 Supervised) with 7794A AES-*IntelliPro*, and integrated onboard Local Annunciator plus MCT, Red Enclosure
2.0 ACCESSORIES	
7794A	Standalone AES-*IntelliPro* Fire full data module add-on accessory board with firmware for new *IntelliNet* 2.0 units only, cannot be used in legacy units
77-WiFi	AES certified WiFi adapter
77-FACPA	FACP Power Supply Adapter for internal mount
77-FACPA-KIT	External installation hardware for 2-way Junction Box
***Legacy* Fire Subscribers**	
7706-ULF	Integrated Fire Monitoring System, Red Enclosure
7788F-ULP-P	Legacy Fire Subscriber, 8 Zone with 7795 AES-*IntelliPro* (7794 full data module, 7762 hardware supervisory module, and 7740 Local Annunciator), Red Enclosure
7788F-ULP	Legacy Fire Subscriber, 8 Zone, 8 Supervised Zones with 7794 AES-*IntelliPro*, Red Enclosure
7788F	Legacy Fire Subscriber, 8 Zone, 8 Supervised Zones, Red Enclosure
7744F-ULP-P	Legacy Fire Subscriber, 4 Zone with 7795 AES-*IntelliPro* (7794 full data module, 7762 hardware supervisory module, and 7740 Local Annunciator), Red Enclosure
7744F-ULP	Legacy Fire Subscriber, 4x4 Zone, 4 Supervised Zones with 7794 AES-*IntelliPro*, Red Enclosure
7744F	Legacy Fire Subscriber, 4x4 Zone, 4 Reversing Polarity, 4 Supervised Zones, Red Enclosure
LEGACY ACCESSORIES	
7794	Standalone AES-*IntelliPro* Fire full data module add-on accessory board for legacy units only, please see 7794A above for *IntelliNet* 2.0 version

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7707 Fire

Technical Specifications

DIMENSIONS
13”H x 8.5”W x 4.5”D
(33cmH x 21.5cmW x 11.4cmD)

WEIGHT
5.8 lbs (2.6 kilograms)
excluding battery
13 lbs (5.9 kilograms) with
10 Ah battery

RADIO FREQUENCY
Standard Frequency Range:
450-470 MHz
Contact AES for other UHF
and VHF frequencies

ANTENNA
2.5 dB tamper resistant antenna
included, mounts on enclosure
Optional remote mounting
antenna available

POWER INPUT
AC SOURCES
Transformer: Class 2
16.5V AC nominal output
1.9 A max current (40 VA MIN)
ELK ELK-TRG1640,
MG ELECTRONIC SALES MGT1640,
or AES 1640 (not included)
DC SOURCES (includes FACP)
24V DC Regulated Power Supply
with Subscriber
Rechargeable Battery
1.9 A max current

BACKUP BATTERY
10-12 Ah, UL recognized lead acid
gel cell, size based on subscriber
configuration

ALARM SIGNAL INPUTS/ZONES
- 8 individually programmable E.O.L. type zone inputs
- 4+4: 4 reverse polarity input and 4 individually programmable E.O.L. type zone inputs
- Optional 7794A AES-*IntelliPro* for full data via Contact ID, Pulse, Modem IIe and Modem IIIa2

UL LISTINGS
UL 864 10th Edition
Standard for Control Units and
Accessories for Fire Alarm Systems
ULC S559-04 1st Edition
Equipment for Fire Signal
Receiving Centres and Systems

TROUBLE OUTPUT—ACK DELAY/ANTENNA CUT
Form C relay, fail secure, rated 24V
DC 1A resistive, unsupervised

RESET BUTTON
Located on main circuit board

OPERATING TEMPERATURE
32 to 120°F (0 to 49°C)

STORAGE TEMPERATURE
14 to 140°F (-10 to 60°C)

RELATIVE HUMIDITY
0 to 93%, non-condensing

RECHARGE CAPABILITY
Will charge 12V battery size
from 10-12 Ah

PORTS
Ethernet for configuration
and message communication
USB access for software upgrade

REMOTE ANNUNCIATOR
AES Model 7740
Remote Annunciator, supervised

COMPATIBLE RECEIVERS
7705i AES-MultiNet Receiver

CONFIGURATION INTERFACE
Web browser capable device
accessible via smartphone, tablet,
laptop, or PC

CURRENT CONSUMPTION
Standby w/ charged backup battery:
200 mA (1.2 A Transmitting)
Standby + charging backup battery:
900 mA (1.9 A Transmitting - MAX)

POWER OUTPUT
2 or 5 Watts
Factory set

ENCLOSURE MATERIAL
Steel with paint finish

FINISH COLOR
Red

VISUAL INDICATORS
Front panel LCD
(2 x 20 alphanumeric character
backlit display)
Power and Trouble LEDs
(ALM, Trouble, Tx, Rx, WA)

Contact Us

For pricing and availability or to learn more about *IntelliNet* 2.0, please call your local AES Sales Representative at (800) 237-6387 or email sales@aes-corp.com.

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DURACELL® ULTRA SLA Batteries

General Pu

Backup and deep cycle applications

Duracell® Ultra SLA technology offers high-density power that out-performs traditional lead acid batteries. The Absorbed Glass Mat (AGM) construction is designed for efficient gas recombination and allows for maintenance-free operation. Duracell® Ultra SLA batteries maintain their high capacity with a design that is resistant to damage caused by deep discharge. Every Duracell® Ultra SLA battery is inspected to ensure the highest standards in materials and fabrication.

50-150
Cycles at 100% Discharge

SPILL PROOF GUARANTEE

Features:

- Duracell® Ultra SLA GEL batteries contain a proprietary grid alloy formula combined with advanced plate curing techniques to provide maximum performance.
- Duracell® Ultra batteries contain a unique electrolyte formula with a special sub-colloid additive for higher reliability and longer life.
- Will achieve more life cycles than standard AGM and Deep Cycle batteries.
- The unique construction and sealing techniques of these batteries are guaranteed to give you leak-proof operation.
- Heavy-duty lead calcium tin alloy grids provide an extra margin of performance and service life in cyclic applications, even after repeated over-discharges.
- Quality Assurance Engineers monitor and control the entire production process.
- Recycling of used SLA batteries available.
- Delivery available.

CASE Quantities AVAILABLE

Sealed Lead Acid

- Maintenance Free
- Spill Proof Design
- 1 YEAR — 1 Year Warranty
- Stringent Quality Control

DURACELL® ULTRA SLA Batteries

PROJECT NAME:
CATALOG #
FIXTURE TYPE
NOTES

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General Purpose

Battery	Volts	Capacity Ah (20Hrs)	Dimensions (LxWxH Inches)			Terminal Type	Group Size	Weight (Lbs.)
DURA12-0.8WL	12V	0.8	3.78	0.98	2.4	WL	-	0.77
DURA12-1.3F	12V	1.3	3.82	1.69	2.28	F1, T1	-	1.37
DURA12-2.3F	12V	2.3	6.97	1.38	2.64	F1, T1	-	2.04
DURA12-2.9F	12V	2.9	3.11	2.2	3.9	F1, T1	-	2.36
DURA12-3.3F	12V	3.3	5.28	2.64	2.63	F1, T1	-	3.18
DURA12-3.3F2	12V	3.3	-	-	-	-	-	-
RAYA12-4F	12V	4	3.54	2.76	4.21	F1, T1	-	-
DURA12-5F	12V	5	3.54	2.76	4.21	F1, T1	-	-
DURA12-5F2	12V	5	3.56	2.77	3.94	F2, T2	-	-
DURA12-5.1A	12V	5.1	5.51	1.89	4.21	F1, T1	-	4.6
DURA12-5.5F	12V	5.5	3.54	2.76	3.98	-	-	-
RAYA12-7F	12V	7	5.95	2.56	3.94	F1, T1	-	-
DURA12-7F	12V	7	5.94	2.56	3.94	F1, T1	-	-
DURA12-7F2	12V	7	5.94	2.56	3.7	F2, T2	-	-
DURA12-8F	12V	8	5.94	2.56	3.94	F1, T1	-	-
DURA12-8F2	12V	8	5.94	2.56	3.94	F2, T2	-	-
DURA12-9NB	12V	9	5.95	2.56	3.9	NB, J	-	-
DURA12-9F2	12V	9	5.95	2.56	3.94	F2, T2	-	-
DURA12-10F2	12V	10	5.95	2.54	4.38	F2, T2	-	7.5
DURA12-11NB	12V	11	5.28	3.15	6.5	-	-	10.1
DURA12-12F2	12V	12	5.94	3.9	3.98	F2, T2	-	-
DURA12-12F	12V	12	5.94	3.86	3.86	F1, T1	-	-
DURA12-14F2	12V	14	5.94	3.86	3.98	F2, T2	-	8.91
DURA12-18F2	12V	18	7.13	3.03	6.57	F2, T2	-	-
DURA12-18NB	12V	18	7.13	3.03	6.57	NB, J	-	12.43
DURA12-26NB	12V	26	6.5	6.93	4.92	NB, J	-	20.7
DURA12-35C	12V	35	7.72	5.16	6.5	C	-	27.3
DURA12-44C/FR	12V	46	7.8	6.54	6.85	C	-	38
DURA12-55C/FR	12V	55	9.02	5.43	8.35	-	-	42.1
DURA12-80C/FR	12V	80	10.24	6.65	8.46	C	-	-
DURA12-100C/FR	12V	100	12.09	6.65	8.46	C	-	74.6
DURA12-140C/FR	12V	140	13.43	6.81	11.3	C	-	108
DURA4-4.5F2	4V	4.5	1.85	1.85	3.98	F2, T2	-	1.4
DURA6-1.3F	6V	1.3	3.82	0.94	2.28	F1, T1	-	0.715
DURA6-2ST	6V	2	1.69	1.45	2.99	ST	-	0.75
DURA6-2.9F	6V	2.9	2.6	1.46	3.82	F1, T1	-	1.26
DURA6-3.3F	6V	3.3	5.28	1.34	2.64	F1, T1	-	1.65
RAYA6-4F	6V	4	2.76	1.85	4.13	F1, T1	-	-
DURA6-5SP	6V	5	2.6	2.6	4.53	SP	-	2.09
DURA6-5F	6V	5	2.76	1.85	4.21	F1, T1	-	-
DURA6-7.2F	6V	7.2	5.94	1.34	3.68	F1, T1	-	2.43
DURA6-8.2F	6V	8.2	3.9	2.24	4.53	F1, T1,	-	3.8
DURA6-10F	6V	10	5.94	1.97	3.98	F1, T1	-	4.851
DURA6-12F	6V	12	5.94	1.97	3.98	F1, T1	-	-
DURA6-12F2	6V	12	5.94	1.97	3.98	F2, T2	-	4.602
RAYA6-14T2	6V	14	4.25	2.8	5.51	H	-	6.24
DURA6-14A	6V	14	4.25	2.8	5.51	F1 (-) F2 (+), T1 (-) T2 (+), FP	-	6.16
DURA6-42F2	6V	42	6.25	3.37	6.37	F2, T2	-	16.64
DURA6-42NB	6V	42	6.34	3.43	6.42	NB, J	-	16.62
DURA6-200C	6V	200	12.05	6.65	8.63	C	-	-
DURA8-3.2F	8V	3.2	5.28	1.44	2.48	F1, T1	-	1.65

Visit batteriesplus.com for warranty information

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Batteries + Bulbs