ISO/IEC 29341-19-1

Edition 1.0 2011-08

INTERNATIONAL STANDARD

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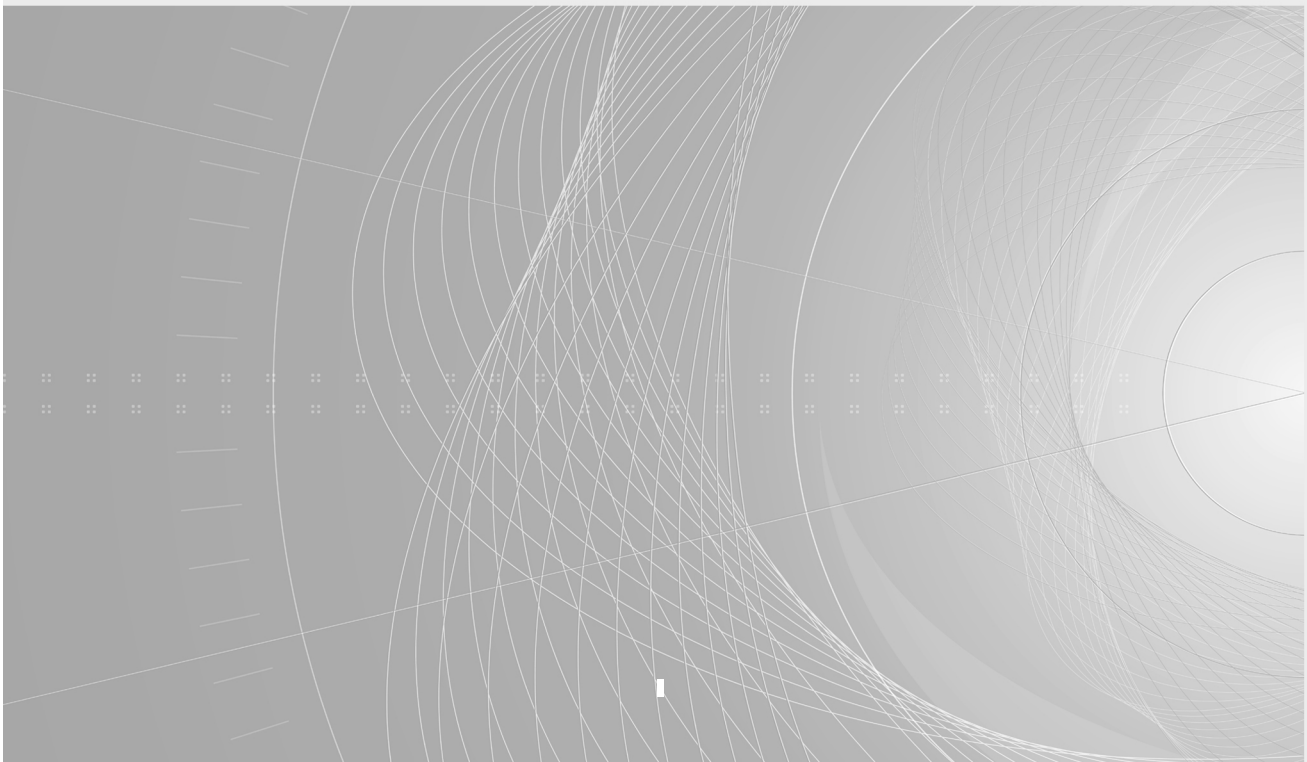
Information technology – UPnP device architecture – Part 19-1: Solar Protection Blind Device Control Protocol – Solar Protection Blind Device



ISO/IEC 29341-19-1:2011(E)

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INFORMATION TECHNOLOGY – UPNP DEVICE ARCHITECTURE –

Part 19-1: Solar Protection Blind Device Control Protocol – Solar Protection Blind Device

FOREWORD

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10) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 29341-19-1 was prepared by UPnP Forum Steering committee[1], was adopted, under the fast track procedure, by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The list of all currently available parts of the ISO/IEC 29341 series, under the general title *Information technology – UPnP device architecture*, can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

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1 UPnP Forum Steering committee, UPnP Forum, 3855 SW 153rd Drive, Beaverton, Oregon 97006 USA. See also “Introduction”.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

1 Overview and Scope

This device template is compliant with the Universal Plug and Play Architecture, Version 1.0.

SolarProtectionBlind:1 provides the following functionality:

- Provide shade with a blind. Any position can be reach between fully opened and fully closed. The control is manual, automatic or disable. A protected mode avoids the deterioration of the product.

This device template does not address:

- Configuration of the automation and of the protection.

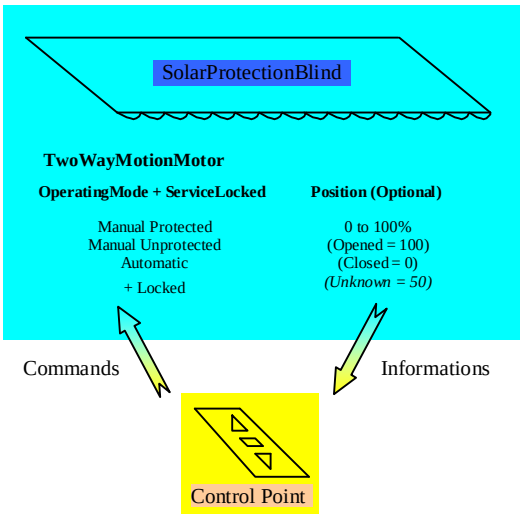

Figure 1 — *SolarProtectionBlind:1* Functional Diagram

2 Device Definitions

2.1 Device Type

The following device type identifies a device that is compliant with this template:

urn:**schemas-upnp-org:device**:*SolarProtectionBlind:1*

2.2 Device Model

Products that expose devices of the type **urn:schemas-upnp-org:device:***SolarProtectionBlind:1* must implement minimum version numbers of all required embedded devices and services specified in the table below.

Table 1 — Device Requirements

DeviceType	Root	Req. or Opt. [a]	ServiceType	Req. or Opt. [a]	Service ID [b]
SolarProtectionBlind:1	*Root*	*R*	*TwoWayMotionMotor:1*	*R*	*blind*
			TwoWayMotionMotor:1	*O*	*slats*
			Non-standard services embedded by an UPnP vendor go here.	*X*	*TBD*
Non-standard devices	*TBD*	*X*	*TBD*	*TBD*	*TBD*

embedded by a UPnP vendor go here.					

a R = Required, O = Optional, X = Non-standard

b Prefixed by urn:upnp-org:serviceId:

2.3 Theory of Operation

The device has four operation modes:

a) Manual unprotected and unlocked: the user fully controls the blind.

b) Manual protected and unlocked: the user controls the blind but the protections can overcome his orders.

c) Automatic and unlocked: the user cannot control the motion of the blind.

d) Locked: the blind stays motionless until the product is unlocked.

If the Solar Protection Blind provides separate position information for the slats then an optional service for control of the slats may be used. Otherwise the position (angle) of the slats is controlled with the motion of the blinds using the Open, Close and Stop commands.

3 XML Device Description

```
<?xml version="1.0"?>
<root xmlns="urn:schemas-upnp-org:device-1-0">
  <specVersion>
    <major>1</major>
    <minor>0</minor>
  </specVersion>
  <URLBase>base URL for all relative URLs</URLBase>
  <device>
    <deviceType>urn:schemas-upnp-org:device:SolarProtectionBlind:1</deviceType>
    <friendlyName>short user-friendly title</friendlyName>
    <manufacturer>manufacturer name</manufacturer>
    <manufacturerURL>URL to manufacturer site</manufacturerURL>
    <modelDescription>long user-friendly title</modelDescription>
    <modelName>model name</modelName>
    <modelNumber>model number</modelNumber>
    <modelURL>URL to model site</modelURL>
    <serialNumber>manufacturer's serial number</serialNumber>
    <UDN>uuid:UUID</UDN>
    <UPC>Universal Product Code</UPC>
    <iconList>
      <icon>
        <mimetype>image/format</mimetype>
        <width>horizontal pixels</width>
        <height>vertical pixels</height>
        <depth>color depth</depth>
        <url>URL to icon</url>
      </icon>
      XML to declare other icons, if any, go here
    </iconList>
    <serviceList>
      <service>
        <serviceType>urn:schemas-upnp-org:service:TwoWayMotionMotor:1</serviceType>
        <serviceId>urn:upnp-org:serviceId:blind</serviceId>
        <SCPDURL>URL to service description</SCPDURL>
        <controlURL>URL for control</controlURL>
        <eventSubURL>URL for eventing</eventSubURL>
      </service>
      <service>
        <serviceType>urn:schemas-upnp-org:service:TwoWayMotionMotor:1</serviceType>
        <serviceId>urn:upnp-org:serviceId:slats</serviceId>
        <SCPDURL>URL to service description</SCPDURL>
        <controlURL>URL for control</controlURL>
        <eventSubURL>URL for eventing</eventSubURL>
```

```
      </service>
      Declarations for other services added by UPnP vendor (if any) go here
    </serviceList>
    <deviceList>
      Description of embedded devices added by UPnP vendor (if any) go here
    </deviceList>
    <presentationURL>URL for presentation</presentationURL>
  </device>
</root>
```

4 Test

Syntactical testing is performed by the UPnP test tool based on the XML description as provided in Clause 3.

The working committee and the implementers have come to the conclusion that further test descriptions e.g. for semantical testing do not provide a higher level of interoperability.

Thus the XML description is deemed to be sufficient for testing of devices that implement this template and further test descriptions are are not provided by this template.

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