

RFID Techniques and Applications (RP 4.2.20)

RFID Technology – overview and introduction, RFID standards - EPC Gen2
Protocols ,Vendors etc (4)

Physics of RFID – Overview, Frequencies ,Waveforms, backscatter communication and
Testing (4)

RFID Readers – various types , parts of a readers , selection of reader based on
applications (4)

RFID Tags – types , parts , selection of a tag, RFID tags for metallic object identification
(4)

RFID antennas- Tag antenna design methodology, Label antenna design, antenna
selection based on applications (4)

Electromagnetic coupling in RFID- measures of label excitation, coupling relation, near
field operation (4)

RFID Security - Layers of security for tags, cryptography for low cost RFID, RFID
authentication (3)

RFID Applications- RFID for bio medical application, RFID enabled supply chain
(3)